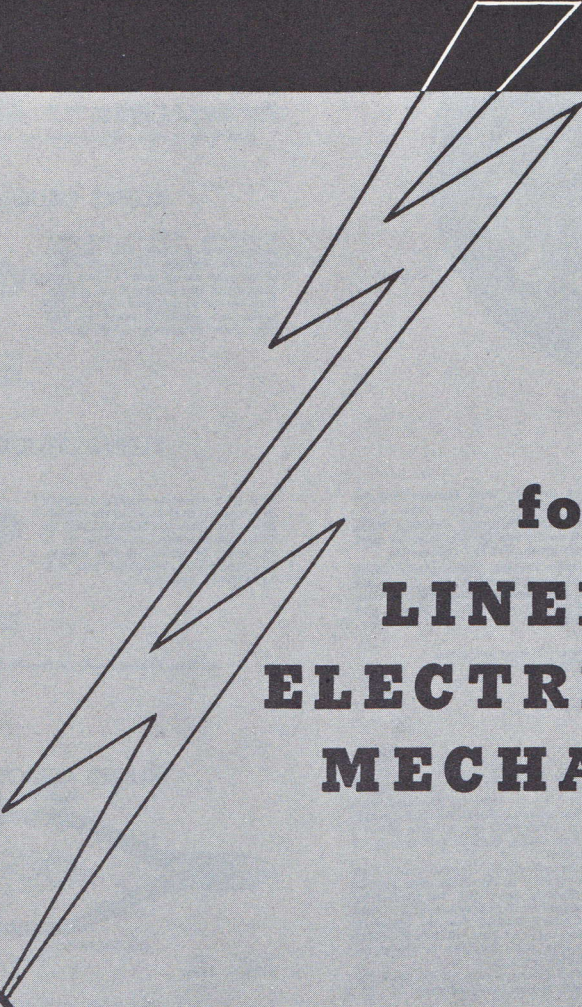


# KLEIN TOOLS



**for**  
**LINEMEN**  
**ELECTRICIANS**  
**MECHANICS**

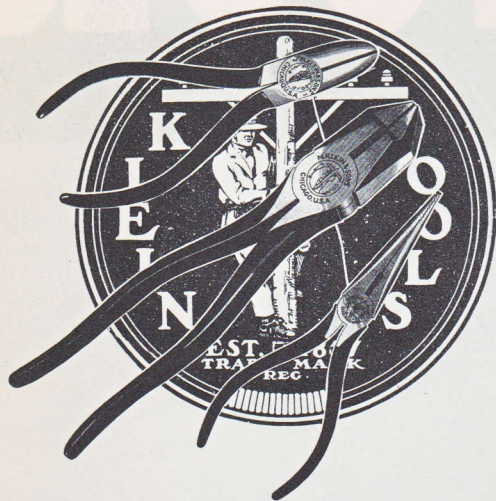


**CATALOG No. 39**  
**Issued March 1939**



# GENUINE KLEIN TOOLS

## KLEIN PLIERS



All Klein Pliers are hammer forged from high grade tool steel made specially to our analysis.

Every plier is individually fitted, tempered, adjusted and tested. (The test in every case being far in excess of any pressure that could be applied by hand).

Klein Pliers are the established standard in the electrical industry and have equal acceptance with the men on steel construction and

reinforced concrete work because they far outlast the ordinary commercial tool.

In general manufacturing wherever Klein Pliers are used Klein Quality is relied upon to increase production and reduce cost.

We guarantee all Klein Tools against defects in material or workmanship ( ), but this does not mean they are indestructible. When properly used, Klein Tools will give years of service.

*A few drops of light oil at the hinge now and then will keep your pliers working smoothly and prevent undue wear.*

## KLEIN'S SIDE CUTTING PLIER



No. 201

CAT. No.	SIZE	WEIGHT PER DOZ.
201-5	5-inch	3 lbs.
201-6	6-inch	5 1/4 lbs.
201-7	7-inch	7 1/4 lbs.
201-8	8-inch	11 1/4 lbs.
201-9	9-inch	14 lbs.

For use on bare and insulated wire. For linemen, electricians and mechanics. Adaptable for all uses where a high quality plier of this type is required.

Genuine Klein Linemen's Side Cutting Plier is one of the most popular pliers in use today. Its handles are shaped to the curvature of the hand, a much desired feature. Powerful leverage and keen reinforced cutting knives make this plier adaptable for heavy cutting.

Full clearance back of the knife permits use on insulated wire.

## KLEIN'S SIDE CUTTING PLIER

With Sleeve-Joint Twister



No. 212

CAT. No.	SIZE	WEIGHT PER DOZ.
*212-6	6-inch	5 1/4 lbs.
*212-7	7-inch	7 1/4 lbs.
*212-8	8-inch	11 1/4 lbs.

For use on bare and insulated wire. For linemen and electricians. Specially designed for telegraph and telephone work.

This plier is the same as No. 201 series, but with opening provided for twisting double tube sleeve joints.

\*Sleeve opening in 6" and 7" pliers for Nos. 14 and 17 N.B.S. and No. 12 B. & S. (.045.)

\*Sleeve opening in 8" pliers for No. 12 N.B.S. and No. 10 B. & S. (.104.)

(This series of pliers can be modified with meter seal instead of sleeve openings to order only.)

## KLEIN'S SIDE CUTTING PLIER

N.E. Type ("Stream-lined")



No. 201-N.E.

CAT. No.	SIZE	WEIGHT PER DOZ.
201-5 N.E.	5-inch	3 lbs.
201-6 N.E.	6-inch	5 1/4 lbs.
201-7 N.E.	7-inch	7 1/4 lbs.
201-8 N.E.	8-inch	11 1/4 lbs.
201-9 N.E.	9-inch	13 1/2 lbs.

For use on bare and insulated wire. For linemen, electricians and mechanics. Adaptable for all uses where a high quality plier of this type is required.

These pliers are identical with Series 201 except that the nose is round to permit working in confined space and all edges are rounded to prevent nicking of wire.

Full clearance back of the knife permits use on insulated wire.

All Pliers, Polished Heads and Handles Temper Blued. Standard Package 6 in a box.

## KLEIN'S SIDE CUTTING PLIER

N.E. Type ("Stream-lined") With Sleeve-Joint Twister

These pliers are identical with Series 201-N.E. but have opening provided for twisting double tube sleeve joints.



No. 212-N.E.

\*Sleeve opening in 6" and 7" pliers for Nos. 14 and 17 N.B.S. and No. 12 B. & S. (.045.)

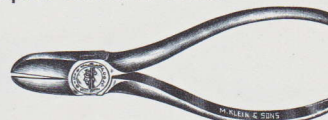
\*Sleeve opening in 8" pliers for No. 12 N.B.S. and No. 10 B. & S. (.104.)

(This series of pliers can be modified with meter seal instead of sleeve openings to order only.)

CAT. No.	SIZE	WEIGHT PER DOZ.
*212-6 N.E.	6-inch	5 1/4 lbs.
*212-7 N.E.	7-inch	7 1/4 lbs.
*212-8 N.E.	8-inch	11 1/4 lbs.

## KLEIN'S OBLIQUE CUTTING PLIER

Electricians, telephone men and switchboard builders will find this particular oblique cutting plier one of the most useful tools in their kits. Cuts close, the narrow head permitting its use in confined places. The knives are perfectly fitted, so that they meet accurately at all points.

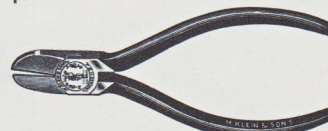


No. 202

CAT. No.	SIZE	WEIGHT PER DOZ.
202-5	5-inch	3 3/4 lbs.
202-6	6-inch	4 lbs.

## KLEIN'S OBLIQUE CUTTING PLIER

This plier measures exactly 5 inches in length. It is slightly smaller in all dimensions than the 202-5 and will be found particularly convenient as it can easily be carried in vest pocket. For electricians, telephone men and switchboard builders.



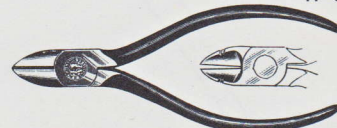
No. 245

CAT. No.	SIZE	WEIGHT PER DOZ.
245-5	5-inch	3 lbs.

All Pliers, Polished Heads and Handles Temper Blued. Standard Package 6 in a box.

## KLEIN'S OBLIQUE CUTTING PLIER

With "W" Stripping Notches



No. 245-W

CAT. No.	SIZE	WEIGHT PER DOZ.
245-5-W	5-inch	3 lbs.

This tool has two "W" shaped notches at back of the cutting knives. Specially designed for removing acetate cellulose insulation from .050 and .058 wires used on telephone distributing frames, etc.

## KLEIN'S OBLIQUE CUTTING PLIER

With Wire Stripping Notch and Sleeve Openings



No. 240-S

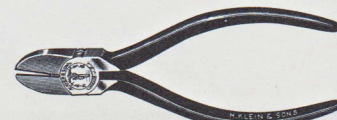
CAT. No.	SIZE	WEIGHT PER DOZ.
240-5-S	5-inch	3 3/4 lbs.

This plier is same as 202 series but with addition of stripping notch and openings for twisting sleeves. Made in one size only.

Another use for the notch is that it provides a means for "crimping" on .032—.025 single tube copper sleeves often used in telephone work for splicing .032 bridle wire and .025 inside wire. When so used make two "crimps" at each end of sleeve for .032 bridle wire and three "crimps" for .025 inside wire.

## KLEIN'S OBLIQUE CUTTING PLIER

With Wire Stripping Notch



No. 240

CAT. No.	SIZE	WEIGHT PER DOZ.
240-5	5-inch	3 3/4 lbs.
240-6	6-inch	4 lbs.

This plier is identical with the No. 202 series with the addition of a notch in the cutting knives for stripping small wires. The notch is placed 3/16 inch from hinge and has diameter of .052 inch and can be used for "crimping" single tube copper sleeves as described under No. 240-S above.

All Pliers, Polished Heads and Handles Temper Blued. Standard Package 6 in a box.



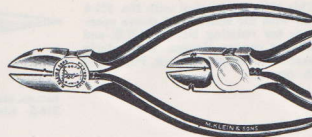
# GENUINE KLEIN TOOLS

## KLEIN'S OBLIQUE CUTTING PLIER

With "W" Stripping Notches, Sleeve Openings and Skinning Hole  
(Bell System Type)

This plier is the all-purpose cutting tool for telephone installation and maintenance work. The "W" notches will slit acetate cellulose and other insulations from wires up to .058 O.D. A stripping hole .052 diameter is provided in blades. Sleeve openings in handles.

Another use for the notch is that it provides a means for "crimping" on .032-.025 single tube copper sleeves often used in telephone work for splicing .032 bridle wire and .025 inside wire. When so used make two "crimps" at each end of sleeve for .025 inside wire.

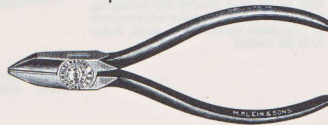


No. 202-SW

CAT. No.	SIZE	WEIGHT PER DOZ.
202-S-SW	5 1/2-inch	3 3/4 lbs.

## KLEIN'S NARROW NOSED OBLIQUE CUTTING PLIER

This plier has narrow hinge and pointed nose, enabling convenient use in confined space. The knives are perfectly matched for clean cutting. Much used in telephone and radio work.



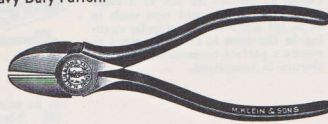
No. 202-A

CAT. No.	SIZE	WEIGHT PER DOZ.
202-S-A	5-inch	3 3/4 lbs.
202-A	6-inch	4 lbs.

## KLEIN'S OBLIQUE CUTTING PLIER

Heavy Duty Pattern

This plier is similar in construction to the No. 202 that has been a favorite with mechanics for many years. It is, however, made heavier to meet the requirements of those desiring a stronger plier for general work. It will be found particularly useful where it is not necessary to reach into closely confined spaces.

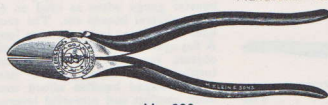


No. 242

CAT. No.	SIZE	WEIGHT PER DOZ.
242-6	6-inch	4 1/4 lbs.

## KLEIN'S "AUTO" OBLIQUE CUTTING PLIER

"Handform" Handles

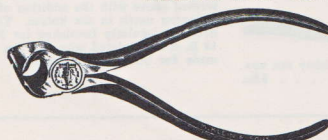


No. 220

CAT. No.	SIZE	WEIGHT PER DOZ.
220-7	7-inch	7 lbs.

Made especially for automotive mechanics and others who demand a high quality plier of this pattern. The knives are close cutting and carefully matched for their full length. Useful for pulling cotter pins, for choke wires etc. The "Handform" handles provide full leverage and comfort for continual use.

## KLEIN'S END CUTTING PLIER



No. 232

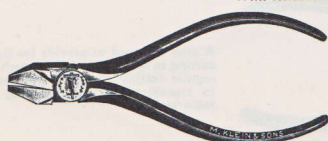
CAT. No.	SIZE	WEIGHT PER DOZ.
232-5 1/2	5 1/2-inch	3 1/4 lbs.
*232-7	7-inch	7 1/2 lbs.

A generally useful end cutting plier for electrical mechanics. Has stout jaws and broad cutting knives. There is ample room in the throat of pliers when needed. Frequently used for enclosed work which cannot be reached with the oblique type of cutter.

\*The 7" size has "handform" handles as used on our side cutting pliers.

## KLEIN'S DIAGONAL CUTTING PLIER

With Raised Knives



No. 235

CAT. No.	SIZE	WEIGHT PER DOZ.
235-6	6-inch	3 1/4 lbs.

This plier has perhaps as many uses as the oblique pattern. It has long cutting knives well matched, so as to permit close and clean cutting. The head is narrow to penetrate confined places and work between binding posts, etc. The knives are correctly constructed to cut clean and to give lasting service.

## KLEIN'S LONG NOSE PLIER, WITHOUT CUTTERS

This style of plier has been perfected to meet a long-felt want of the electrician and general mechanic. Special features are its adaptability to stripping the ends of insulated wire and the extra long reach of the jaws which permits getting into difficult places. For switchboard, telegraph and telephone work, armature winding, etc. This tool is especially hardened and tempered to insure positive grip at point of nose when pressure is applied. Point 3/32 in. round.

\*This plier has extra long nose—measuring 2 3/4" from center of hinge to point.

NOTE: No. 301 series supersedes former No. 316 series (Bell System Type).



No. 301

CAT. No.	SIZE	WEIGHT PER DOZ.
301-5	5-inch	3 1/4 lbs.
301-6	6-inch	3 3/4 lbs.
*301-7	7-inch	4 1/4 lbs.

## KLEIN'S LONG NOSE, SIDE CUTTING PLIER

Has the same features as No. 301 series shown above, with the addition of the cutting knives. The knives are carefully fitted and the body of the plier is hardened and tempered, assuring true cutting. Point 3/32 in. round.



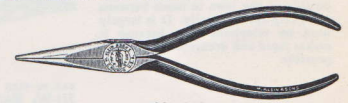
No. 203

\*This plier has extra long nose—measuring 2 3/4" from center of hinge to point.

CAT. No.	SIZE	WEIGHT PER DOZ.
203-5	5-inch	3 1/4 lbs.
203-6	6-inch	3 3/4 lbs.
*203-7	7-inch	4 1/4 lbs.

## KLEIN'S LONG NEEDLE NOSE PLIER

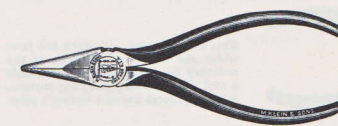
This tool has all the features of No. 301 series, with the exception that the points of the nose are of the needle point pattern, which some mechanics prefer. The thin points make these pliers more useful for the general class of work done in Central Offices. Point 1/16 in. round.



No. 303

CAT. No.	SIZE	WEIGHT PER DOZ.
303-6	6-inch	3 3/4 lbs.

## KLEIN'S CHAIN NOSE PLIER, WITHOUT CUTTERS



No. 317

CAT. No.	SIZE	WEIGHT PER DOZ.
317-6	6-inch	3 1/2 lbs.

This plier is intended for general use where a shorter nose is desirable. Made in one size only—6 inch.

## KLEIN'S CHAIN NOSE PLIER, SIDE CUTTING



No. 217

CAT. No.	SIZE	WEIGHT PER DOZ.
217-6	6-inch	3 1/2 lbs.

A chain nose plier similar to No. 317-6 but with side cutting knives. The knives are carefully matched and cut true over their entire length. Made in one size only—6 inch.

## KLEIN'S HEAT-COIL PLIER



No. 313

CAT. No.	SIZE	WEIGHT PER DOZ.
313-6	6-inch	3 3/4 lbs.

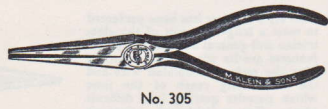
Particularly adapted for the removing of heat coils from switchboards and telephone terminals, the points of the nose being shaped to fit the coils. This tool is also serviceable in removing caps from batteries or from binding posts, as well as holding any cylindrical object.



# GENUINE KLEIN TOOLS

## KLEIN'S LONG FLAT NOSE PLIER

Extra long wide flat nose makes this an especially useful plier. This plier is hardened and tempered, so that the jaw will not spring when pressure is applied. This tool is adaptable to switchboard work, telephone and telegraph work, armature winding, etc. A very handy tool for spring adjusting. This plier can be supplied with inside of jaws left smooth if desired.



CAT. No. SIZE WEIGHT PER DOZ.  
305-6 6-inch . . . . . 3 1/2 lbs.

## KLEIN'S LONG FLAT NOSE, SIDE CUTTING PLIER

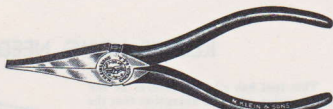
This plier is similar in its usefulness to No. 305 series with the added advantage of cutting knives.



CAT. No. SIZE WEIGHT PER DOZ.  
206-6 6-inch . . . . . 3 1/2 lbs.

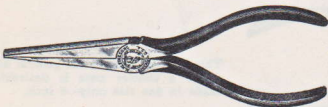
## KLEIN'S LONG FLAT NOSE, SPRING ADJUSTING PLIER

This plier is hollow ground on the outside of the jaws to reach between and grasp springs easily. It is largely used by telephone men because it makes rapid and accurate adjustments possible.



CAT. No. SIZE WEIGHT PER DOZ.  
311-5 1/2 5 1/2-inch . . . . . 3 1/4 lbs.

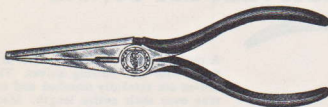
## KLEIN'S LONG DUCK BILL PLIER



CAT. No. SIZE WEIGHT PER DOZ.  
304-6 6-inch . . . . . 3 1/2 lbs.

This plier is fitted with duck bill jaws wider and heavier than those of the ordinary flat nose plier. This affords a tool with a firmer gripping surface. Also in general use as a weaver's plier.

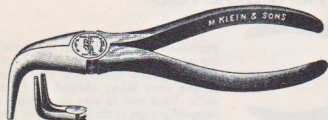
## KLEIN'S LONG DUCK BILL, SIDE CUTTING PLIER



CAT. No. SIZE WEIGHT PER DOZ.  
205-6 6-inch . . . . . 3 1/4 lbs.

This type is the same as No. 304 duck bill, with the addition of cutting knives. As on all Klein Pliers, the cutters are carefully fitted so as to cut easily and true.

## KLEIN'S LONG CURVED NOSE PLIER



CAT. No. SIZE WEIGHT PER DOZ.  
302-6 6-inch . . . . . 3 1/4 lbs.

A handy plier for working around switchboards, terminals and telephones, due to the nose being curved. The angle is arranged to give full clearance and prevent skinning of knuckles. Users will find this tool adaptable to a great variety of uses. The jaws will not lose their shape or set due to pressure applied, owing to the quality of steel used, its hardening and tempering.

## KLEIN'S LONG NOSE SLEEVE PLIER

(Bell System Type)

This plier is identical with No. 301-6 but with the addition of sleeve openings for twisting No. 17 N.B.S. and smaller copper sleeves. Particularly useful for telephone work. Point 3/32 in. round.



CAT. No. SIZE WEIGHT PER DOZ.  
316-S 6-inch . . . . . 3 3/4 lbs.

## KLEIN'S LONG NOSE CORD CRIMPING PLIER

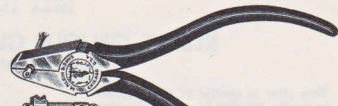
This plier is same as 301-6 with addition of an oval groove for crimping telephone cords. A great convenience in telephone switchboard work. Point 3/32 in. round.



CAT. No. SIZE WEIGHT PER DOZ.  
301-C 6-inch . . . . . 3 3/4 lbs.

## KLEIN'S CORD TIP CLOSING PLIER

The jaws of this tool are of sturdy design to permit its use as a hand press for closing cord tips such as W.E. 101 and 102. The circular opening in the jaws is correctly sized to ensure a perfect connection when the closure is completed.



CAT. No. SIZE WEIGHT PER DOZ.  
039 5-inch . . . . . 3 lbs.

## KLEIN'S HEAVY DUTY LONG NOSE CUTTING PLIER



CAT. No. SIZE WEIGHT PER DOZ.  
203-8 8-inch . . . . . 8 lbs.

A long round nose cutting plier for heavier gauge wires as used on elevator control boards etc. The round nose 2 3/4 in. long is for forming loops. A flat space ahead of the knife holds objects securely, will also "crack" insulation conveniently. The "hand-form" shaped handles afford maximum comfort and powerful leverage.

## KLEIN'S HEAVY DUTY LONG NOSE CUTTING PLIER With Stripping Notch



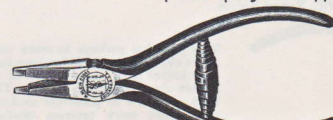
CAT. No. SIZE WEIGHT PER DOZ.  
203-8N 8-inch . . . . . 8 lbs.

This plier is same as No. 203-8 described above with the addition of a stripping notch in the knives. This notch is regularly furnished for No. 12 B. & S. insulated wire, but can be made for other sizes to order.

The following pliers fitted with spring opening handles are special patterns for bench work on radio sets, radio tubes, switchboards, distributing frames and other production work for which they may be suited. The springs fitted serve to keep pliers open in position ready for immediate use without the necessity of opening up by hand—a time saver and convenience.

## KLEIN'S LONG NOSE PLIER

(Volute Spring—With 1/4" Knife at Point)



CAT. No. SIZE WEIGHT PER DOZ.  
301-6-VP 6-inch . . . . . 4 lbs.

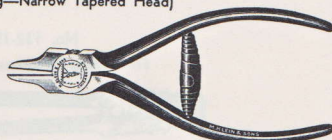
A plier designed to provide for light cutting in spaces beyond the reach of regular cutting pliers. Largely used in manufacturing and servicing of radio sets.



# GENUINE KLEIN TOOLS

## KLEIN'S OBLIQUE CUTTING PLIER (Volute Spring—Narrow Tapered Head)

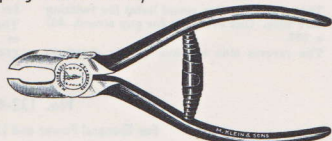
This plier is especially useful for light cutting in confined spaces. Largely used in radio tube shops. Volute spring keeps plier open.



CAT. No. SIZE WEIGHT PER DOZ.  
202-5-VO 5 1/2-inch . . . . . 3 3/4 lbs.

## KLEIN'S OBLIQUE CUTTING PLIER (Volute Spring—Cutout Knives)

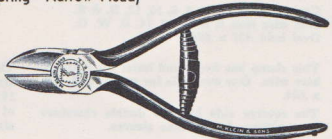
A tool specially designed for cutting at tip only with balance of knife removed, thus providing a space 1/4-inch wide to clear any interfering obstruction. (Largely used on radio tube construction.) Volute spring keeps plier open for use.



CAT. No. SIZE WEIGHT PER DOZ.  
202-5-VC 5 1/2-inch . . . . . 3 3/4 lbs.

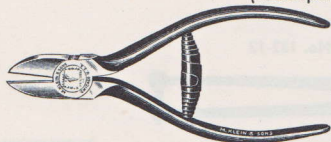
## KLEIN'S OBLIQUE CUTTING PLIER (Volute Spring—Narrow Head)

This is the regular No. 202-5-A Plier but fitted with volute spring for bench work. It is suitable for heavier cutting than the No. 202-5-VO and should be used where the working space permits.



CAT. No. SIZE WEIGHT PER DOZ.  
202-5-AV 5 1/2-inch . . . . . 4 lbs.

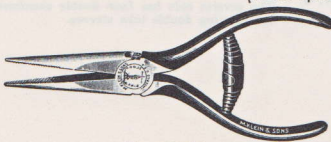
## KLEIN'S OBLIQUE CUTTING PLIER (Volute Spring)



CAT. No. SIZE WEIGHT PER DOZ.  
245-5-V 5-inch . . . . . 3 lbs.

This is the regular 245-5 plier, but fitted with volute spring for cutting in general bench production work.

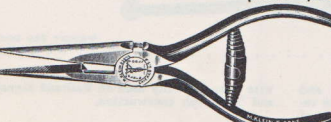
## KLEIN'S LONG NOSE PLIER, WITHOUT CUTTING KNIVES (Volute Spring)



CAT. No. SIZE WEIGHT PER DOZ.  
301-5-V 5-inch . . . . . 3 1/2 lbs.

For bench work where a plain long nose plier is required. The spring keeps plier open at position ready for immediate use.

## KLEIN'S LONG NOSE CUTTING PLIER (Volute Spring)



CAT. No. SIZE WEIGHT PER DOZ.  
203-5-V 5-inch . . . . . 3 1/2 lbs.

A convenient tool for production bench work where a combination of long jaws with cutting knives is required. Fitted with volute spring.

All Pliers, Polished Heads and Handles Temper Blued. Standard Package 6 in a box.

## KLEIN'S SLIP JOINT PLIER

Made of tempered tool steel (like all Klein Pliers) this tool will give service that cannot be expected from the ordinary plier of similar pattern. Has a wire cutter and a screwdriver handle.



CAT. No. SIZE WEIGHT PER DOZ.  
406-6 1/2 6 1/2-inch . . . . . 6 lbs.

## KLEIN'S "UTILITY" SLIP JOINT PLIER

The special features of this plier, which is of the heavy duty type, are adaptability as a pipe wrench and wire cutter. Has sure grip jaws which readily accommodate objects of irregular shape. It is also made of tempered tool steel like the item above.



CAT. No. SIZE WEIGHT PER DOZ.  
407-7 7-inch . . . . . 6 1/4 lbs.

## KLEIN'S BENT NOSE SLIP JOINT PLIER

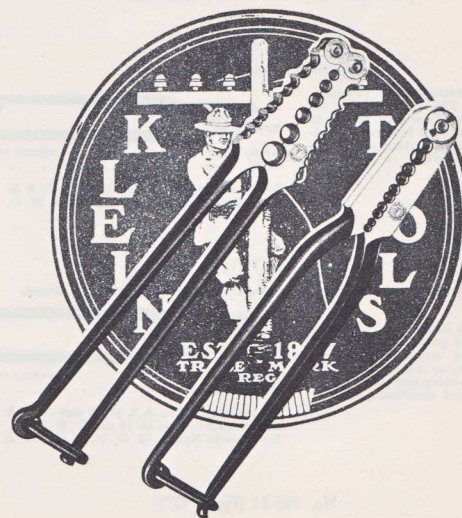
A plier of the bent nose type. Specially designed for use in difficult places. An excellent general purpose tool that should be included in every mechanic's kit. Made of tempered tool steel and can be relied on for maximum service. (Sometimes referred to as Bent Nose Gas Plier.)



CAT. No. SIZE WEIGHT PER DOZ.  
408-8 8-inch . . . . . 7 1/2 lbs.

NOTE:—The slip joint pliers shown on this page are made of tool steel and tempered throughout which enables them to resist the corrosive action of acids around battery work much longer than the cheaper grades of similar pattern.

## KLEIN'S SPLICING CLAMPS



Of all the tools in use, the lineman's splicing clamp is one of the most abused, for in the absence of something more appropriate, the splicing clamp often serves as hammer, wrench or crow bar and then again it must be of service in making dependable electrical and mechanical joints. It is obvious that not "any old thing" is profitable. Apart from the abuse-resisting qualities, the tool must be properly proportioned, the jaws must be properly tempered and hardened so as to

resist wear, the handles must be resistant to bending strain and retain their normal set, and the dies for holding the wires and sleeves must fit. To all this especial attention is given in Klein Splicing Clamps.

The entire range of sleeve and wire sizes practical for this type of tool are included in the Klein Splicing Clamps listed on the following pages, which comprise the combinations most suitable for the work for which they are intended.

A few drops of light oil at the hinge occasionally will keep your clamps working smoothly as well as add to their life.



# GENUINE KLEIN TOOLS

## KLEIN'S SPlicing CLAMPS

### No. 102-1

This clamp is arranged with five round holes for bare wire.



A handy pocket size, adapted especially for telephone troublemen. The openings cover wire sizes in general use.

CAT. No. SIZE WEIGHT PER DOZ.  
102-1 8-inch . . . . . 5 3/4 lbs.  
Copper wire Nos. 8, 10, 12, 14, 16, B. & S.  
Iron wire Nos. 10, 12, 14, 16, 18, B. W. G.

### No. 102-3 and No. 102-30

For bare wire, arranged with five round holes and one oval hole.



Used in telephone, telegraph and power line work, covering a wide range of wires. Large hole can also be used in serving guy wire or messenger strand, and is sometimes used for No. 4 copper sleeves. The dies fit the wires snugly to insure perfect mechanical and electrical joints.

CAT. No. SIZE WEIGHT PER DOZ.  
102-3 10 3/4-inch . . . . . 16 3/4 lbs.  
Copper wire Nos. 2, 4, 6, 8, 10, 12, B. & S.  
Iron wire Nos. 4, 6, 8, 10, 12, 14, B. W. G.  
(For same wires but holes reversed. See No. 102-30)



In the 102-3 the large hole is at the hinge. In the 102-30 the holes have been reversed, to meet the requirements of those preferring this arrangement.

CAT. No. SIZE WEIGHT PER DOZ.  
102-30 10 3/4-inch . . . . . 16 3/4 lbs.  
Copper wire Nos. 2, 4, 6, 8, 10, 12, B. & S.  
Iron wire Nos. 4, 6, 8, 10, 12, 14, B. W. G.  
(For same wires but holes reversed. See No. 102-3)

### No. 102-48

This clamp has five openings for twisting bare copper wire.



Designed to meet the general range of wire sizes used by Electric Light and Power Companies.

The largest hole is also convenient to bring together the guy strand before applying a three bolt clamp.

CAT. No. SIZE WEIGHT PER DOZ.  
102-48 10 3/4-inch . . . . . 16 3/4 lbs.  
Copper wire Nos. 0, 2, 4, 6 and 8, B. & S.

## KLEIN'S SPlicing CLAMPS

### No. 105-15

For twisting double tube sleeves.

This is a convenient pocket size splicing clamp. The chambers are arranged to fit the sleeves snugly so that sleeves are not injured in twisting and insure perfect mechanical and electrical joints.



CAT. No. SIZE WEIGHT PER DOZ.  
105-15 8-inch . . . . . 5 3/4 lbs.  
Copper sleeves Nos. 8, 10, 12, 14, 17, B. & S.  
Iron sleeves Nos. 10, 12, 14, 16, 19, B. W. G.

### No. 105-17 (Type "B")

This clamp has five sets of chambers for twisting double tube sleeves

This clamp is intended for telephone, telegraph and power line work. The chambers are arranged to fit the sleeves snugly so that sleeves are not injured in twisting and insure perfect mechanical and electrical joints.



CAT. No. SIZE WEIGHT PER DOZ.  
105-17 10 3/4-inch . . . . . 17 lbs.  
Copper sleeves Nos. 6, 8, 10, 12 and 14, B. & S.  
Copper sleeves Nos. 12, 14 and 17, N. B. S.  
Iron sleeves Nos. 8, 10, 12, 14, 16 and 19, B. W. G.

### No. 105-31 (Type "C")

This is a special clamp or sleeve twister of the plier type.

The jaw being forward of the hinge permits convenient use in confined spaces. Much used in telephone work by troublemen and installers.



CAT. No. SIZE WEIGHT PER DOZ.  
105-31 8 1/4-inch . . . . . 5 3/4 lbs.  
Three double chambers for twisting Nos. 10 and 12 B. & S. sleeves, Nos. 12, 14 and 17 N. B. S. sleeves.

Hammer Forged from High Grade Tool Steel. Polished Heads and Handles Temper Blue.

## KLEIN'S COMBINATION WIRE AND SLEEVE CLAMPS

### No. 132-15

For General Telephone Line Work



CAT. No. SIZE WEIGHT PER DOZ.  
132-15 11 1/4-inch . . . . . 18 lbs.  
Copper wire Nos. 4, 6, 8, 10, 12, B. & S.  
Iron wire Nos. 6, 8, 10, 12, 14, B. W. G.  
Oval hole .437 x .624.

This clamp has five round holes for twisting bare wire. One oval hole for guy strand, .437 x .624.

The reverse side has five double chambers

for twisting double tube sleeves.

This clamp covers complete range of wires as usually handled by telephone and telegraph linemen.

### No. 132-46

For General Power and Light Line Work



CAT. No. SIZE WEIGHT PER DOZ.  
132-46 11 1/4-inch . . . . . 17 3/4 lbs.  
Copper wire Nos. 4, 6, 8, 10, 12, B. & S.  
Iron wire Nos. 6, 8, 10, 12, 14, B. W. G.  
Oval hole .437 x .624.

This clamp has five round holes for twisting bare wire. One oval hole for guy strand, .437 x .624.

The reverse side has five double chambers for twisting double tube sleeves.

This clamp is similar to No. 132-15 but is arranged to take copper sleeves No. 4 to No. 12 B. & S. It is intended particularly for use of power companies requiring this range of sizes.

Sleeve openings modified for single (oval) tube sleeves to order.

## KLEIN'S COMBINATION WIRE AND SLEEVE CLAMPS

### No. 132-12



CAT. No. SIZE WEIGHT PER DOZ.  
132-12 9-inch . . . . . 11 lbs.

Copper wire Nos. 6, 8, 10, 12, B. & S.  
Iron wire Nos. 8, 10, 12, 14, B. W. G.  
Copper sleeves Nos. 8, 10, 12, 14, 17, B. & S.  
Iron sleeves Nos. 10, 12, 14, 16, 19, B. W. G.

Standard telephone splicing clamp for general line and trouble work.

This clamp has four round holes for twisting bare wire.

The reverse side has four double chambers for twisting double tube sleeves.

### No. 132-30

For Railroad Signal and Telegraph Work



CAT. No. SIZE WEIGHT PER DOZ.  
132-30 11 1/4-inch . . . . . 18 lbs.

The sleeve openings are for N.B.S. and B.W.G. sizes 9 and 8 respectively. The remaining five openings cover the range of

wire sizes generally used on Railroad Signal and Telegraph construction.

Hammer Forged from High Grade Tool Steel. Polished Heads and Handles Temper Blue.



# GENUINE KLEIN TOOLS

## KLEIN'S "COPPERWELD" SLEEVE CLAMP

No. 132-48 (For Copperweld)



CAT. No.	SIZE	WEIGHT PER DOZ.
132-48	1 1/2-inch	18 lbs.

This clamp has four chambers for twisting single tube (oval) sleeves used for making joints on Copperweld conductors sizes

- 4A, 6A, 8A and 3 No. 12. These chambers also accommodate single tube (oval) sleeves as per following table.
- |          |  |
|----------|--|
| 4A       | Copperweld or No. 1 solid B. & S. or No. 2 strand B. & S. Copper |
| 6A       | Copperweld or No. 3 solid B. & S. or No. 4 strand B. & S. Copper |
| 8A       | Copperweld or No. 4 solid B. & S. or No. 5 strand B. & S. Copper |
| 3 No. 12 | Copperweld or No. 5 solid B. & S. or No. 6 strand B. & S. Copper |

The swing latch provided holds the head securely closed while joint is being twisted, preventing any slippage or "burning" which

might develop otherwise from bowing of handles when twisting the larger sleeves.

## KLEIN'S STRAND AND WIRE HOLDING TOOL

No. 132-39



CAT. No.	SIZE	WEIGHT PER DOZ.
132-39	1 1/4-inch	18 lbs.

This tool serves as a temporary clamp to hold together two sections of strand or wire while

placing permanent clamps or splicing and serving. A real convenience and time saver.

Openings will fit:

- |  |                                     |
|--|-------------------------------------|
| 1/8" strand (16,000 lb. Bell System)                           | 3/8" strand (2,200 lb. Bell System) |
| 3/8" strand (10,000 lb. Bell System)                           | 1/2" strand (1,000 lb. Bell System) |
| 7/64" solid No. 12 B. W. G. Iron or No. 10 B. & S. Copper Wire |                                     |
| 3/32" solid No. 13 B. W. G. Iron or No. 11 B. & S. Copper Wire |                                     |

## KLEIN'S WIRE AND SLEEVE CLAMPS

No. 132-47



CAT. No.	SIZE	WEIGHT PER DOZ.
132-47	1 1/2-inch	18 lbs.

This clamp has five special chambers for twisting single tube or oval (Memco) sleeves Nos. 2, 4, 6 and 8 and No. 104.

These sizes cover the range most generally used by Electric Light and Power Companies. The chambers (or openings) are a modified "figure 8" shape, giving a secure hold which prevents "burning" the sleeve when the joint is twisted.

The swing latch provided is necessary to overcome any spring in the handle which might otherwise develop in a tool of this type when used on larger sleeves.

A stop in the hinge prevents the handles from opening beyond the point convenient for clamping on to the sleeve.

No. 132-74



CAT. No.	SIZE	WEIGHT PER DOZ.
132-74	1 1/2-inch	16 lbs.

This clamp has three special chambers for twisting single tube or oval (Memco) sleeves Nos. 2, 4 and 6. Also an oval (hog) hole .437 x .624 for guy strand.

The chambers (or openings) are a modified "figure 8" shape, giving a secure hold which prevents "burning" the sleeve when the joint is twisted.

The swing latch provided is necessary to overcome any spring in the handle which might otherwise develop in a tool of this type when used on the larger sleeves.

A stop in the hinge prevents the handles from opening beyond the point convenient for clamping on to the sleeve.

Hammer Forged from High Grade Tool Steel. Polished Heads and Handles Temper Blue.

## KLEIN'S "DI-STOCK" SLEEVE TWISTER

No. 107-20



CAT. No.	WEIGHT EACH
107-20 (for oval or double tube sleeves) (copper or aluminum)	3 1/4 lbs.
Length overall, 23 1/2 in.	

This tool supersedes previous No. 107-2

This tool has been improved by making the handles tubular 7/8" diameter and threading them onto the head. They can be readily attached or removed—a real convenience when

clearance is limited, also affording considerable reduction in weight.

We recommend this Di-Stock for use on all types and makes of sleeves from No. 4 B. & S. Solid up to No. 3/0 B. & S. Strand. (For larger sleeves see Di-Stock No. 107-34.)

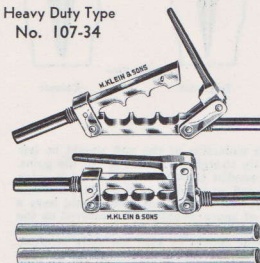
Space between yokes is 3"—usually sufficient for three sleeve openings.

The head is readily tightened onto the sleeve and securely held by means of a thumb nut operating in the hinged yoke as illustrated. The central position of the head makes for ease in keeping the sleeve straight while the joint is being twisted, besides providing ample leverage.

These tools are held in blank and finished with sleeve openings as ordered.

(See note regarding details of sleeve sizes required with your order.)

Heavy Duty Type  
No. 107-34



CAT. No.	WEIGHT EACH
107-34 (for oval or double tube sleeves) (copper or aluminum)	8 3/4 lbs.
Length overall, 34 in.	

This tool is similar to the Klein Di-Stock Sleeve Twister No. 107-20 but is of heavier construction for use on larger size sleeves. Of ample capacity for sleeves No. 3/0 B. & S. up to 500,000 c.m. B. & S. and corresponding size aluminum. The handles are tubular 1 1/8" diameter and are attached to the head by means of a quick acting thread. This arrangement makes it possible to remove either of the handles quickly and easily when clearance is required.

A hand operated lock lever closes the head easily on the sleeve and maintains it securely in position while the joint is being made.

Distance between the yokes on the head is approximately 4 inches, giving ample room for two or even three sleeve openings of large size. The head is forged from high grade tool steel and is heat treated for maximum toughness and wear.

We carry a stock of these tools in blank and cut the openings to order as required.

(See note regarding details of sleeve sizes required with your order.)

NOTE—There being no standard on sleeves, actual samples for which twisting tools are desired should accompany order. When this cannot be done the following data MUST be furnished. (1) Trade name or name of manufacturer. (2) Sleeve number or size. (3) Type of sleeve (oval, double-tube, etc.). (4) Size and type of conductor sleeves will be used on.



## SAFETY AND COMFORT

Safety is the first and vital point in considering Climbers.

The linemen going up a pole depends entirely on his spurs; he must continue to depend on them while working, often with both hands in use, and he must depend on those same spurs to bring him safely to the ground again.

To assure the utmost dependability Klein Climbers are forged from special steels and are individually tempered under expert supervision.

The shanks and gaffs are individually tested to insure perfect riveting and temper.

The shape of Klein Climbers has been carefully considered. It is the result of many years' experience and much practical suggestion from linemen. Bad fitting climbers cause

as much discomfort as ill fitting shoes. Klein Climbers have flexible shanks and yield readily to the pressure of the leg, they do not chafe. The gaff or spur is correct in shape, set of angle and temper. It is riveted to the leg iron securely.

Linemen in general recognize Klein Climbers as the standard.

Worn gaffs can be replaced by sending the climbers to us. We require this to assure dependable workmanship and temper.

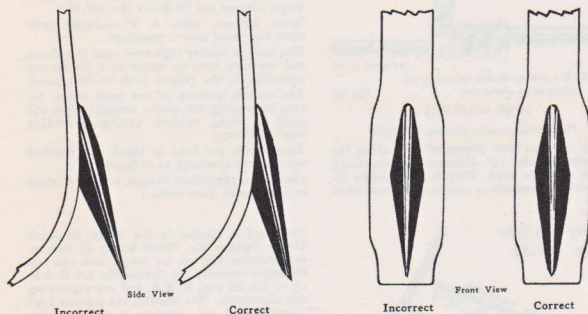
It is not good safety practice to continue using climbers after the gaffs are worn to less than 1 1/4 inches long (measured on the underside).

We cannot consider any claim for replacement of climbers on which the gaffs show evidence of grinding, re-tempering or other misuse.



# GENUINE KLEIN TOOLS

## INSTRUCTIONS for Sharpening Gaffs (Spurs) on KLEIN CLIMBERS



1. Always use sharp file. NEVER grind to a point on any kind of wheel as you are likely to set up heat which will spoil the temper of the gaff and make it dangerous to use.
2. Set climber in a vise with the gaff uppermost and the stirrup of the climber turned down so that you can file from heel to point of gaff. File toward the point and down to the edges of the underside of the gaff. Remove only sufficient material to make a good point.
3. Do not make a needle point. File both side slopes, but not the top of gaff, to even rounded surfaces, so that the final point is always in the top ridge of the gaff.

4. The underside of the gaff should be left perfectly straight to within  $\frac{1}{8}$ " of the point, then rounded slightly toward the top ridge of the gaff on a radius of  $\frac{1}{4}$ ". At a distance  $\frac{1}{8}$ " back from the point, you should have a width of approximately  $\frac{1}{2}$ " measured on the underside of the gaff. The remainder of the underside should be kept perfectly straight.
5. For safety, climbers should not be used after the gaffs are worn or filed to  $1\frac{1}{4}$ " long, measured on the underside of the gaff. When climbers get in this condition, they should be regaffed or a new pair obtained. By following these simple instructions, a satisfactory job can be secured and no unnecessary risks will be taken.

These instructions are printed in bulletin form for distribution. Furnished gratis.

## KLEIN'S "STREAMLINED" LINEMEN'S CLIMBERS No. 1939

The design is new. The use of any unnecessary metal has been carefully avoided. The leg irons are flexible and tapered in width and thickness. The critical section from 3 inches above the gaff to half way across the stirrup has been designed for ample strength.

The gaffs are slender type—preferred on treated ("Black Jack") poles. A wrought ring carries the ankle strap.

These climbers are approximately one third lighter in weight than standard patterns and about 10% lighter than the original "lightweight."

They offer every possible comfort and a full factor of safety.

Gaffs  $3\frac{1}{2}$  inches long measured on the outside.

Stock sizes 15, 15½, 16, 16½, 17, 17½ and 18 inches, measured from instep to end of shank. Other sizes to order. Every climber individually tested.

CAT. No. 1939 Riveted Top Loop, Ring at Ankle . . . . . 2½ lbs.

(With this Climber use Ankle Strap No. 5301-16 or No. 5301-26. See page 43.)

No. 1939

## KLEIN'S STANDARD LINEMEN'S CLIMBERS

No. 1900 and 1901

Stock sizes 15, 15½, 16, 16½, 17, 17½ and 18 inches, measured from the instep to the end of shank. Other sizes to order. Every climber individually tested.

Gaffs  $3\frac{1}{2}$  inches long measured on the outside.

CAT. No. 1900 Riveted Strap Loops . . . . . 3½ lbs.  
1901 Punched Strap Loops . . . . . 3½ lbs.

No. 1900

No. 1901

NOTE—In ordering climbers always mention the length of shank wanted. Measure from instep to the extreme end of leg irons which should come 1 in. below the knee joint for comfort. The position of the gaff hole in the leg iron makes it impracticable to interchange gaffs between linemen's climbers and tree climbers or vice versa.

## KLEIN'S "LIGHTWEIGHT" LINEMEN'S CLIMBERS No. 1903

Stock sizes 15, 15½, 16, 16½, 17, 17½ and 18 inches, measured from the instep to the end of shank. Other sizes to order. Every climber individually tested.

These climbers are similar to No. 1900, but are made somewhat lighter in the leg iron.

Gaffs  $3\frac{1}{2}$  inches long measured on the outside.

CAT. No. 1903 Riveted Strap Loops . . . . . 2½ lbs.

No. 1903

## KLEIN'S TREE CLIMBERS No. 1907

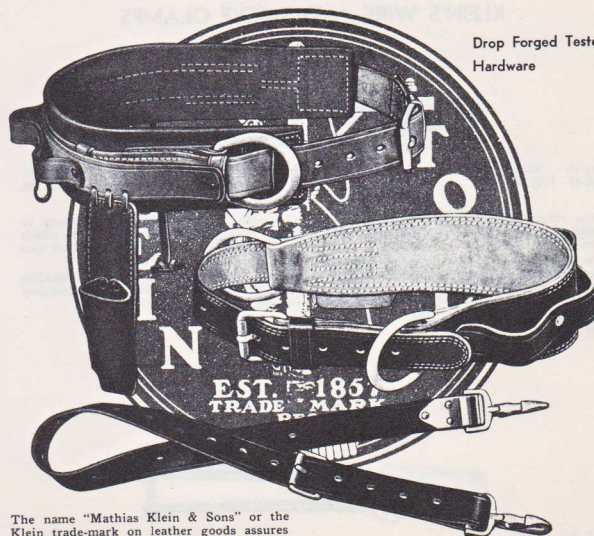
These climbers are similar to the No. 1901 but are furnished with extra long gaffs necessary to penetrate bark in tree climbing. The gaffs (or spurs) are  $5\frac{1}{2}$  inches long, measured on the outside, and 3 inches long, measured on the underside. They are set high in the leg iron so that the points clear the ground when walking. These are the standard tree climbers used by Forest Rangers, High Riggers, Fire Wardens and Surveyors.

Stock sizes 15, 15½, 16, 16½, 17, 17½ and 18 inches, measured from the instep to the end of shank. Other sizes to order. Every climber individually tested.

CAT. No. 1907 Punched Strap Loops . . . . . 4 lbs.

No. 1907

NOTE—In ordering climbers always mention the length of shank wanted. Measure from instep to the extreme end of leg irons which should come 1 in. below the knee joint for comfort. The position of the gaff hole in the leg iron makes it impracticable to interchange gaffs between linemen's climbers and tree climbers or vice versa.



The name "Mathias Klein & Sons" or the Klein trade-mark on leather goods assures quality and trustworthiness.

The very life of a lineman depends upon the reliability of his belt and strap. First cost is incidental—quality MUST be the best.

Klein's leather is first quality "slow process" vegetable tanned harness leather selected for its strength and durability and checked by chemical analysis and frequent laboratory tensile tests.

The same skilled workmanship is evident on those Belts and Safety Straps we list, where "Klein-Kord" replaces leather. (For a de-

scription of this special fabric see page 54.)

All genuine "Klein" "D" Rings, Snaps and Buckles are drop forged from bar steel in our own plant and individually tested to 1500 lbs.

All sewing is done with hot waxed genuine Irish linen thread, lock stitched. Riveting by hand with solid copper rivets.

"Klein" Belts and Straps are standard with and exclusively specified by many of the largest utility corporations, railroads, fire departments, etc. in the country.

Write for special bulletins giving actual specifications, drawings and other vital information on the factor of safety of Belts and Safety Straps. These are furnished gratis.



# GENUINE KLEIN TOOLS

## RULES FOR CARE OF LEATHER

It pays to give safety straps and tool belts proper attention. Below are a few rules, which, if carefully followed, will give you service you have a right to expect from Klein leather goods.

Go over leather at least once every 90 days and scrape out the "scale" that forms whenever metal rubs against the leather. Examine for stretch, wear, cracks and cuts.

Take a small quantity of "Neatsfoot oil on a rag and rub into the leather on the hair side. Do not flush the oil on directly from the can—every inch of the leather should be uniformly covered to keep it pliable and waterproof.

In storage particular care should be taken to keep belts and straps away from direct or close contact with heat, such as steam coils, radiators or stoves. Leather exposed to such conditions rapidly deteriorates and loses its tensile strength. It becomes dry, brittle and unreliable. After exposure to water or acid, belts and straps should be wiped off as quickly as possible with an oily rag dipped in "Neatsfoot oil as before described.

Never dry damp or wet leather with the aid of heat. Such treatment weakens the fiber of the leather, and may even destroy it if sufficient temperature is used.

**BEND TEST**—This should only be made when leather contains sufficient oil to make it soft and pliable. At room temperature bend the leather slowly with the grain side out over a mandrel not less than 1/2 inch in diameter through an angle of 180°. Do not bend at buckle holes in any case. If leather of such thickness as necessary for Belts and Straps is abused by abrupt bending without a mandrel, the leather may develop cracks on account of the excessive strain put on the grain side. When tested as directed above the leather should show no cracks although there may be a slight opening up of the grain surface.

**NOTE**—We will not replace any belt or strap which has been cracked or broken on the grain side by "forced" bending.

### NEATSFOOT OIL

\*For the convenience of our customers and to ensure the best grade, we furnish genuine Neatsfoot oil in cans with full directions for use as follows:



CAT. No.	WEIGHT PER DOZ.
N.O.-1 Pint Can . . . . .	15 lbs.
N.O.-2 Quart Can . . . . .	27 lbs.
N.O.-4 Half Gallon Can . . . . .	52 lbs.

## KLEIN'S "DEE" RINGS, SNAPS AND BUCKLES

Used on Body Belts, Safety Straps, Climber Straps, Etc.

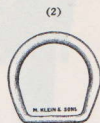
All the above are solid steel forgings of approved designs individually tested to 1500 lbs. Each piece integral—no joints or welds. We make these fittings in our own shops—

they should not be confused with ordinary commercial or harness fittings. All these items are galvanized finish.

**"DEE" RINGS** We make three patterns of "Dee" Rings. All have 2 1/4 inch strap opening or clevis: (1) Standard—double bar, (2) Standard—single bar, (3) "Hank's"—single bar.



Standard—Double Bar



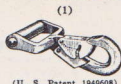
Standard—Single Bar



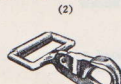
"Hank's"

"Hank's" Dee Rings must be used with corresponding "Hank's" Snaps on Safety Strap.

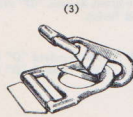
**SNAPS** There are three patterns of snaps each with two sizes of clevis to fit strap widths 1 1/4 inch and 2 inch: (1) "Klein-Lok," (2) Standard, (3) "Hank's."



(U. S. Patent 1949508)  
"Klein-Lok"



Standard



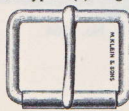
(U. S. Patent 1755286)  
"Hank's"

"Klein-Lok" Snaps provide an added safety feature by an arrangement of twin latches. The back latch locks the thumb latch. To release from Dee Ring BOTH latches must be depressed AT THE SAME TIME. Operates quickly and simply. Impossible to twist Dee Ring out accidentally. Can be used with any Dee Ring.

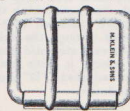
Wide nose covers the latch to prevent "D" ring accidentally releasing itself.

Once engaged it is impossible to release the snap accidentally. Simple in operation, positive in action. ("Hank's" Snaps must be used with corresponding "Hank's" "D" Rings on body belt.)

**BUCKLES** Klein Buckles have drop forged frames and tongues. The frame is in one piece—a real safety factor as compared with welded wire. Sizes: 1", 1 1/4", 1 1/2", 1 3/4", 2". Types: (1) single tongue, (2) double tongue (1 3/4" and 2").



Single Tongue



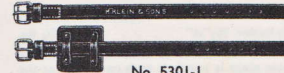
Double Tongue

## KLEIN'S CLIMBER STRAPS AND PADS

The pads are made in three principal patterns: (1) Square, (2) Oblong (tapered), (3) Pear shape. Straps are furnished various lengths—two widths 1 1/4" and 1". All leather used is first quality harness

leather. All sewing is lock stitched with genuine linen thread hot waxed. The buckles and buckle tongues are Klein standard solid steel drop forgings—tested to 1500 lbs.

### KLEIN'S CLIMBER STRAPS WITH SQUARE PADS



No. 5301-1

The set consists of:  
2 upper (or calf) straps 1 1/4" x 22".  
2 lower (or ankle) straps 1 1/4" x 22".  
2 square pads 4" x 4".

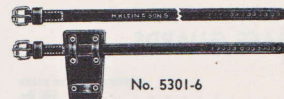
CAT. No.	WEIGHT PER DOZ. SETS
5301-1 One set complete with plain pads . . . . .	20 lbs.
5301-2 One set complete with sheep-lined pads . . . . .	20 lbs.
5301-3 One set complete with felt-lined pads . . . . .	20 lbs.

SAME AS ABOVE BUT STRAPS 1" WIDE.

5301-11 One set complete with plain pads . . . . .	18 lbs.
5301-12 One set complete with sheep-lined pads . . . . .	18 lbs.
5301-13 One set complete with felt-lined pads . . . . .	18 lbs.

### KLEIN'S CLIMBER STRAPS WITH OBLONG PADS

"Bell System" Type



No. 5301-6

The set consists of two upper or calf straps 1" x 22" with two special pads as shown and two lower or ankle straps 1" x 26".

CAT. No.	WEIGHT PER DOZ. SETS
5301-6 One set complete with plain pads . . . . .	14 lbs.
5301-7 One set complete with sheep-lined pads . . . . .	15 lbs.
5301-8 One set complete with felt-lined pads . . . . .	15 lbs.

These pads are made of select leather, arranged with loops for climber straps and climber. Tapering 3 3/4" to 2 3/4" x 6 1/4" deep.

## KLEIN'S CLIMBER STRAPS

(Without Pads)



CAT. No.	WEIGHT PER DOZ. PAIRS
5301-4 One pair (2 straps) 1 1/4" x 22" . . . . .	8 lbs.
5301-9 One pair (2 straps) 1" x 22" . . . . .	6 lbs.
5301-14 One pair (2 straps) 1 1/4" x 26" . . . . .	9 lbs.
5301-10 One pair (2 straps) 1" x 26" . . . . .	8 lbs.

### KLEIN'S CLIMBER STRAPS (WITH PADS)



CAT. No.	WEIGHT PER DOZ. PAIRS
5301-5 One pair (2 straps) 1 1/4" x 22" with two plain pads 4" x 4" . . . . .	12 lbs.
5301-15 One pair (2 straps) 1" x 22" with two plain pads 4" x 4" . . . . .	11 lbs.

## KLEIN'S SPECIAL ANKLE STRAPS

(For Ring Attachment on Klein No. 1939 Climbers)



CAT. No.	WEIGHT PER DOZ. PAIRS
5301-16 One pair (2 straps) 1 1/4" x 24" . . . . .	10 lbs.
5301-26 One pair (2 straps) 1" x 24" . . . . .	8 1/2 lbs.

These special straps are made in two pieces and are furnished with rivets and burrs. Punched ready for quick attachment.

(We will rivet these ankle straps to No. 1939 climbers when so ordered.)



# GENUINE KLEIN TOOLS

## KLEIN'S CLIMBER PADS

(Standard Square Shape)

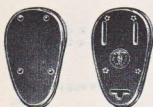


No. 8200

CAT. No.	WEIGHT PER DOZ. PAIRS
8200 One pair (2 pcs.) Sheep-lined, 4"x4"	4 lbs.
8201 One pair (2 pcs.) Felt-lined, 4"x4"	4 lbs.
8202 One pair (2 pcs.) Plain leather, 4"x4"	4 lbs.

Made of select harness leather with loops at back through which climber strap passes.

## KLEIN'S PEAR SHAPE CLIMBER PADS

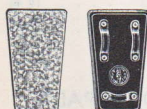


No. 8206

CAT. No.	WEIGHT PER DOZ. PAIRS
8206 One pair (2 pcs.) Plain leather, 3 1/2"x6"	4 1/2 lbs.

These pads are made of two thicknesses of select harness leather riveted together. The outer piece is punched with two slots for the climber strap and one cross slot through which the leg iron of the climber is passed. They are very comfortable, having all edges round.

## KLEIN'S "BELL SYSTEM" TYPE CLIMBER PADS



No. 8204

CAT. No.	WEIGHT PER DOZ. PAIRS
8204 One pair (2 pcs.) Plain leather	6 lbs.
8204 One pair (2 pcs.) Sheep-lined	6 lbs.
8205 One pair (2 pcs.) Felt-lined	6 lbs.

## KLEIN'S CLIMBER GAFF GUARDS



No. 1929-G

CAT. No.	WEIGHT PER DOZ. PAIRS
1929-G One pair (2 pcs.)	1 3/4 lbs.

Made of harness leather. The "wings" of the guard fit around leg iron of climber just above the gaff and snap on. The gaff is covered and protected by the leather "fold over" as illustrated.

A simple safety item.

## GENUINE KLEIN TOOL BELTS

Drop Forged Tested Hardware

### DIRECTIONS TO ENSURE PROPER FIT OF LINEMEN'S BELTS

Linemen's belts are usually specified by waist or body size but to ensure comfort in use it is important that the "D" rings do not rest on the hip-bones of the wearer. The correct position of the "D" rings is about 1 inch in front of the hip-bone on either side.

To obtain correct body size of Klein's Tool Belt, measure (around the back) from hip-bone to hip-bone AND ADD TWO INCHES to this distance. Then refer to table below and select the corresponding belt size.

Distance between "D" Rings	20 in.	22 in.	22 in.	24 in.	26 in.	28 in.
Belt Size	36 in.	38 in.	40 in.	42 in.	44 in.	46 in.

You may order by size or by distance between "D" rings.

## "Hank's" Snaps and "D" Rings

U. S. Patent, No. 1755286



The special construction of "Hank's" Snaps and "D" Rings is such that once engaged, it is impossible to release the snap accidentally from the "D" ring. Yet, when desired, by entirely reversing the snap from the normal

position and giving a quick push forward the operation is accomplished in a second. No thumbing of spring latch is necessary—a boon to the lineman in cold weather or when wearing gloves.

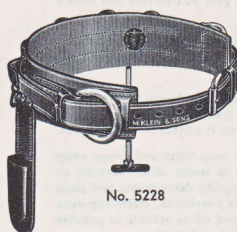
The nose of the snap is returned so that it forms almost a complete "U" with the shank of the hook and by keeping the safety latch inside this nose, the latch is protected from accidental opening as may be caused in the ordinary snap by pressing against a cross arm brace or similar object with which it may come in contact.

The "D" ring is forged in a wedge cross section with the thin edge inwards. The snap is engaged with the "D" in the regular way but IN RELEASING, THE SNAP MUST BE ENTIRELY REVERSED TO ITS NATURAL POSITION and a quick push given to drive the wedge of the "D" into a narrow entrance provided in the snap between the latch and the nose. Reference to the illustration will make the operation easily understood.

Note:—"Hank's" Belts and Safety Straps MUST be used together. They cannot be used in connection with other fittings.

## KLEIN'S LEATHER TOOL BELTS

Made in Sizes 36, 38, 40, 42, 44 and 46 Inches (Other sizes to order)



No. 5228

This belt is a new and somewhat novel pattern providing, in our opinion, the ultimate in safety and comfort.

The cushion—4 1/2 inches wide at center of back and tapered to 3 1/2 inches wide at the

CAT. No.	WEIGHT PER DOZ.
5228 With Standard (Single bar) "D" Rings. Width 4 1/2 in. (Complete)	45 lbs.
H-5228 With "Hank's" "D" Rings. Width 4 1/2 in. (Complete)	45 lbs.

front—is made of one piece of soft, pliable, yet tough, russet latigo leather, doubled to form comfortable rolled edges and returned at each end.

The body strap is first quality russet harness leather 2 inches wide, stitched to the cushion at back and passing through loops at end of cushion as well as through the "dee" rings. A russet harness leather tool strap 1 3/4 inches wide with five loops in the 1 1/4 inch loop strap is carried on leather hangers from the body strap to which it is looped at the ends. This arrangement keeps the tool loops from contracting when belt is buckled on and is also another "comfort" feature.

So constructed that no rivets come through to inside of belt—a safety insulation feature that will be appreciated.

The "dee" rings are single bar type solid steel drop forgings as is also the buckle. All hardware tested to 1500 lbs. Galvanized finish.

Fitted with leather plier pocket, knife snap and tape thong complete.

## KLEIN'S "TEXAS" BELT



No. 5204-TSO

CAT. No.	WEIGHT PER DOZ.
5204-T.S.O. With Standard "D" Rings (single bar). Width 4 in.	36 lbs.
H-5204-T.S.O. With "Hank's" "D" Rings. Width 4 in.	36 lbs.

A popular belt made for comfort and safety. The main belt is in one piece lined throughout with soft pliable latigo leather. Width at center of back 4" tapered to 2 3/4" at hips. Dee Rings and Buckle solid steel drop forgings tested to 1500 lbs. Galvanized finish. No rivets go through belt—a special insulating feature.

All rivets are solid copper hand set with burrs. Sewing is with hot waxed linen thread, lock stitched.

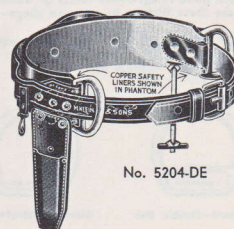
Has latigo flap to which plier pocket may be riveted.

## KLEIN'S LEATHER TOOL BELTS

Made in Sizes 36, 38, 40, 42, 44 and 46 Inches (Other sizes to order)

First quality and selection harness leather throughout. The cushion, 3 1/2 inches wide, carries the Dee rings. The outer strap or tool loop is 1 1/2 inches wide, formed into loops by riveting to the cushion. As an additional safety factor it is also passed through the Dee rings. Dee rings and buckle are solid steel drop forgings of improved design, everyone tested to 1500 lbs. Surfaces taking the wear of the Dee rings are protected by copper safety liners riveted through the full thickness of the belt. A leather pocket is provided for pliers, also a convenient snap for carrying knife. At the other end of the belt a rawhide thong is attached with fibre cross bar for carrying tape. All rivets are solid copper, hand set with burrs. Sewing is with linen thread, hot waxed and lock stitched. A safety belt that is safe. The wide cushion makes it preferred by some for the comfort it gives in use. "D" rings and buckle galvanized finish.

CAT. No.	WEIGHT PER DOZ.
5204-D.E. With Standard "D" Rings. Width 3 1/2 in.	38 lbs.
H-5204-D.E. With "Hank's" "D" Rings. Width 3 1/2 in.	38 lbs.



No. 5204-DE

Made of select first quality harness leather. The cushion 3 1/2 inches wide carries the "D" rings. The outer or loop layer is 1 1/2 inches wide formed into tool loops by riveting to the cushion. It also passes through the "D" rings and is furnished with a strong drop forged buckle tested to 1500 lbs. The "D" rings are solid steel drop forgings tested to 1500 lbs. Surfaces taking the wear of the "D" rings are protected with copper safety liners riveted through the full thickness of belt. All rivets are solid copper set with burrs and sewing is with hot waxed linen thread, lock stitched. "D" rings and buckle galvanized finish.



No. 5204

CAT. No.	WEIGHT PER DOZ.
5204 With Standard "D" Rings (double bar). Width 3 1/2"	34 lbs.
H-5204 With "Hank's" "D" Rings. Width 3 1/2"	34 lbs.



# GENUINE KLEIN TOOLS

## KLEIN'S LEATHER TOOL BELTS

Made in Sizes 36, 38, 40, 42, 44 and 46 Inches (Other sizes to order)



No. 5205

CAT. No.	5205	With Standard "D" Rings (double bar). Width 2 1/4" (double thickness)	WEIGHT PER DOZ.
	H-5205	With "Hank's" "D" Rings. Width 2 1/4" (double thickness)	35 lbs.

Made of select first quality harness leather. The inner or cushion layer 2 1/4 inches wide carries the "D" rings and is locked stitched and riveted to the outer layer which also passes through the "D" rings and is furnished with a strong drop forged buckle tested to 1500 lbs. Galvanized finish.

The "D" rings are solid steel drop forgings tested to 1500 lbs. Surfaces which take the wear of the "D" rings are protected with copper safety liners riveted to the belt. "D" rings and buckle are galvanized finish. All rivets are solid copper, set with burrs and sewing is with hot waxed linen thread, lock stitched. The loop strap is 1 1/4 inches wide formed into 6 loops.



No. 5202

CAT. No.	5202	With Standard "D" Rings (double bar) Width 2 1/4"	WEIGHT PER DOZ.
	H-5202	With "Hank's" "D" Rings Width 2 1/4"	32 lbs.

Made of select first quality harness leather. The cushion 2 1/4 inches wide carries the "D" rings. The outer or loop layer is 1 1/2 inches wide formed into tool loops by riveting to the cushion. It also passes through the "D" rings and is furnished with a strong drop forged buckle tested to 1500 lbs.

The "D" rings are solid steel drop forgings of improved design, tested to 1500 lbs. Surfaces taking the wear of the "D" rings are protected with copper safety liners riveted through the full thickness of belt. All rivets are solid copper set with burrs and sewing is with hot waxed linen thread, lock stitched. "D" rings and buckle galvanized finish.

## KLEIN'S LEATHER TOOL BELTS

Made in Sizes 36, 38, 40, 42, 44 and 46 Inches (Other sizes to order)

First quality harness leather throughout. The inner or cushion layer, 3 inches wide, is narrowed at each end to carry the "D" rings. The body strap, 2 inches wide, is riveted and stitched to the cushion and also passes through the "D" rings. Two tool straps are provided and formed into two loops at each side of the belt by riveting through the two layers of belt proper. "D" rings and buckle are solid steel drop forgings of improved design, each tested to 1500 lbs. They are made in our own shops and are galvanized to prevent rust. Surfaces taking the wear of the "D" rings are protected by copper safety liners riveted through the full thickness of



No. 5211

the belt. All rivets are solid copper, hand set with burrs. Sewing is with linen thread, hot waxed and lock stitched.

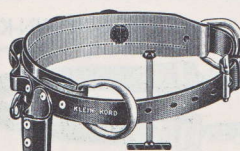
CAT. No.	5211	With Standard "D" Rings (double bar) Width 3"	WEIGHT PER DOZ.
	H-5211	With "Hank's" "D" Rings Width 3"	34 lbs.

## KLEIN'S COMBINATION LEATHER AND "KLEIN-KORD" BELT

Made in Sizes 36, 38, 40, 42, 44 and 46 Inches (Other sizes to order)

Built of a combination of harness leather and "Klein-Kord" fabric (see page 54). The leather cushion is 3 inches wide tapered at the hips. To it is stitched the top (or body) strap of 1 3/4 inch x 6 ply "Klein-Kord." A leather strap 1 inch wide is riveted to the body strap to form five tool loops of convenient size. Fitted complete with leather plier pocket, knife snap and tape-thong.

This construction makes an exceedingly strong belt and one that will not stretch between the "Dee" rings. Rings and Buckle are solid steel drop forgings individually tested to 1500 lbs. Galvanized finish.



No. 5221-KK

CAT. No.	5221-KK	With Standard (Single bar) "Dee" Rings. Width 3 in.	WEIGHT PER DOZ.
	H-5221-KK	With "Hank's" "Dee" Rings. Width 3 in.	36 lbs.

## KLEIN'S DERRICK BELT

Made in One Size—Adjustable from 36" to 44"



No. 5212

This belt is designed for maximum safety for use by derrickmen, structural steel workers,

CAT. No.	5212	3 in. wide. 1 "Dee" Ring	WEIGHT PER DOZ.
			30 lbs.

tree surgeons, tower erectors, etc. The main belt is one piece of first quality harness leather three inches wide at the back, tapered to two inches in width at the buckle. A three inch forged steel dee ring is set at center of back to provide means for securely anchoring the life line or rope. The buckle is solid forged frame fitted with double tongues to guard against slitting the belt in event of a fall. Designed to stand a load of 250 lbs. on a dead fall of five feet. Adjustable for sizes 36" to 44".

## KLEIN'S STEEL WORKER'S BELT

Made in One Size—Adjustable from 36" to 44"



No. 5214

Steel Worker's Belt made of one piece of first quality harness leather two inches wide

CAT. No.	5214	2 in. wide. 3 "Dee" Rings	WEIGHT PER DOZ.
	5214-O	Same as above but without wrench loop	28 lbs.
			27 1/2 lbs.

and fitted with three forged dee rings for attachment of life line in most convenient position. A leather loop is provided for wrench.

The main belt passes through the dee rings which are held in place by backing pieces of latigo leather stitched and riveted to the belt proper.

The two inch buckle is of the double tongue type with solid forged frame. Distance between outer dee rings 24". Adjustable for sizes 36" to 44".

## KLEIN'S LEATHER BELT AND SAFETY STRAP

Drop Forged Tested Hardware



The Tool Belt in this outfit is same as No. 5202. The safety strap is the No. 5250. Belt 2 1/4 inches wide. Strap 1 3/4 inches. All snaps, "D" rings and buckles are solid steel drop forgings tested to 1500 lbs. and are galvanized finish. The strap may be adjusted to any length by means of buckle or it may be detached entirely from belt.

First quality harness leather throughout. Hot waxed linen thread, lock stitched. A very popular combination—thoroughly dependable.

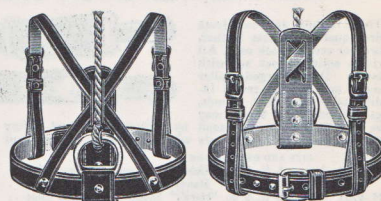
CAT. No.	5206-1A	Strap 1 3/4 in. x 5 ft. 8 in.	WEIGHT PER DOZ.
			62 lbs.

Belt (as ordered) 36, 38, 40, 42, 44 and 46 in.

## KLEIN'S LEATHER SAFETY HARNESS

This harness has been designed for use where danger from gassing is present. Working in gassy manholes, gas tanks, oil tanks and even boilers, men are frequently overcome and an emergency arises instantly. This harness provides a sure means by which the patient can be brought to safety, and the danger overcome. The design of the harness is such that it slings the wearer in a perpendicular position so that he can be readily hauled through an ordinary manhole opening.

A solid harness leather back plate 2 1/4 inches by 10 inches is stitched and riveted around the 1 1/4 inch adjustable belt strap. The back plate also carries a tested drop forged "D" ring to which the 3/4 inch manila life line, 25 feet in length, is permanently attached.



CAT. No.	5209	Harness complete with life line. 3/4 in. rope, 25 ft. long	WEIGHT PER DOZ.
			75 lbs.

The shoulder straps are 3/4 inch and made adjustable and riveted to the belt at the single ends. These straps serve to hold the belt in position around the chest, so as not to encumber the wearer while working.

## KLEIN'S FABRIC TOOL BELT

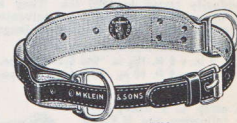
Made in Sizes 36, 38, 40, 42, 44 and 46 Inches

This belt is constructed throughout of a new rubberized fabric specially designed to provide the full factor of safety required.

The fabric is made up of a number of plies laid and vulcanized in live rubber in such a way as to secure the flexibility necessary for comfort as well as to protect the fabric from the weather. The inner surfaces are left untreated to prevent condensation from body heat which might otherwise occur.

The cushion is 3 inches wide tapered at the hips where it is returned through the double bar "dee" rings. The body, or top strap, is 1 1/2 inches wide riveted to the cushion to form four tool loops of convenient size. It also passes through the "dees" as an additional safety precaution. All edges are lock stitched with genuine linen thread. "Dee" Rings and Buckle are solid steel drop forged.

CAT. No.	5227-KK	With Standard "D" Rings. Width 3 in.	WEIGHT PER DOZ.
	H-5227-KK	With "Hank's" "D" Rings. Width 3 in.	25 lbs.



No. 5227-KK

ings, individually tested to 1500 lbs. Galvanized finish.

Line Patrolmen, Inspectors, Service men and others who must carry a belt for occasional use will find this one particularly convenient on account of its light weight and ability to pack into very small space.

(We are in a position to make to order variations of the design shown and will be pleased to quote on special requirements.)



# GENUINE KLEIN TOOLS

## KLEIN'S LEATHER SAFETY STRAPS—1¾" WIDE

Drop Forged Tested Hardware

These straps are cut from first quality harness leather, back or center stock only. All rivets solid copper, hand set with burrs. Snaps and buckles solid steel drop forgings tested to 1500 lbs., galvanized finish. Straps may be lengthened or shortened by adjusting buckle.



No. 5251

CAT. No.	SIZE AND DESCRIPTION	WEIGHT PER DOZ.
KL-5251	1¾ in. x 5 ft. 8 in. "Klein-Lok" Snaps. Leather wear pad at buckle . . . . .	32½ lbs.
5251	1¾ in. x 5 ft. 8 in. Standard Snaps. Leather wear pad at buckle . . . . .	32½ lbs.
H-5251	1¾ in. x 5 ft. 8 in. "Hank's" Snaps. Leather wear pad at buckle . . . . .	32½ lbs.

(This series supersedes Nos. KL-5251-T, 5251-T and H-5251-T)



No. 5250

CAT. No.	SIZE AND DESCRIPTION	WEIGHT PER DOZ.
KL-5250	1¾ in. x 5 ft. 8 in. "Klein-Lok" Snaps. Stainless Clips . . . . .	32½ lbs.
5250	1¾ in. x 5 ft. 8 in. Standard Snaps. Stainless Clips . . . . .	32½ lbs.
H-5250	1¾ in. x 5 ft. 8 in. "Hank's" Snaps. Stainless Clips . . . . .	32½ lbs.

## KLEIN'S LEATHER EXTENSION STRAPS



No. 5215

CAT. No.	SIZE	WEIGHT PER DOZ.
5215	1¾ in. x 15 in. Forged "D" Ring . . . . .	15½ lbs.
H-5215	1¾ in. x 15 in. "Hank's" "D" Ring . . . . .	17 lbs.

These extension straps are worn permanently attached to one "D" ring on body belt. They are brought into use when a large pole makes it necessary to "extend" the regular safety strap.

## KLEIN'S LEATHER SAFETY STRAPS—2" WIDE

These straps are cut from first quality harness leather, back or center stock only. All rivets solid copper set with burrs. Drop forged roller snaps and buckles tested individually to 1500 pounds, galvanized finish. Straps may be lengthened or shortened by adjusting buckle. Reinforced both ends with stainless steel safety clips riveted through double thickness of the leather.



No. 5253

CAT. No.	SIZE AND DESCRIPTION	WEIGHT PER DOZ.
KL-5253	2 in. x 5 ft. 8 in. "Klein-Lok" Snaps. Stainless Clips . . . . .	40 lbs.
5253	2 in. x 5 ft. 8 in. Standard Snaps. Stainless Clips . . . . .	40 lbs.
H-5253	2 in. x 5 ft. 8 in. "Hank's" Snaps. Stainless Clips . . . . .	40 lbs.

The 5253 series can be furnished to order with leather wear pad at buckle instead of stainless steel clip. Order as KL-5253-T, 5253-T or H-5253-T.

This strap is similar to the No. 5253 but has a double tongue buckle. First quality and selection harness leather cut strictly from center or back stock only. Securely sewed with linen thread, hot waxed, lock stitched. Solid copper rivets and burrs set by hand. Snaps and buckle are solid steel drop forgings individually tested to 1500 lbs. They are made in our own shops and are galvanized to prevent rust. The strap may be lengthened or shortened by adjusting buckle. One end reinforced with stainless steel safety clip. The single end is returned through roller of snap and securely sewed and riveted.



No. 5257-S and L

CAT. No.	SIZE AND DESCRIPTION	WEIGHT PER DOZ.
5257-S	2 in. x 5 ft. 10 in. "Bell System" type. Drop Forged Roller Snaps . . . . .	39 lbs.
5257-L	2 in. x 5 ft. 10 in. "Bell System" type. Drop Forged Roller Snaps . . . . .	41 lbs.

This strap is a heavy duty type following the N.E.L.A. specifications. First quality and selection harness leather throughout, cut from center or back stock only. Sewing is with linen thread, hot waxed, lock stitched. Solid copper rivets with burrs hand set. Snaps and buckle are solid steel drop forgings tested to 1500 lbs. They are made in our own shops and are galvanized to prevent rust. The strap may be lengthened or shortened by adjusting the buckle. Reinforced at buckle end with stainless steel safety clip, at the fixed snap the strap is returned and secured by sewing and riveting.



No. 5258

CAT. No.	SIZE AND DESCRIPTION	WEIGHT PER DOZ.
KL-5258	2 in. x 5 ft. 6 in. "Klein-Lok" Snaps. Stainless Clip . . . . .	40 lbs.
5258	2 in. x 5 ft. 6 in. Standard Snaps. Stainless Clip . . . . .	40 lbs.
H-5258	2 in. x 5 ft. 6 in. "Hank's" Snaps. Stainless Clip . . . . .	40 lbs.

## KLEIN-KORD The RED CENTER Fabric for Linemen's Safety Straps

U. S. Patent 2152941

"STOP WHEN YOU SEE RED"

"Klein-Kord" Safety Straps are standard equipment with leading Public Utility Companies, Telephone Companies and others desiring the maximum of safety for their men.

"Klein-Kord" Red Center provides for the first time something Safety Engineers have sought for years—a definite warning when to discard a safety strap.

"Klein-Kord" Red Center fabric is made of six plies of long staple cotton of special weave, each ply laid in rubber and vulcanized. This construction provides maximum strength and safety.

Red rubber is used on the two center plies to provide an unmistakable signal when the use of the strap should be discontinued.

The "Klein-Kord" Red Center Safety Strap may be used with perfect safety until two outside plies are worn completely through. Then (it speaks for itself)

"STOP WHEN YOU SEE RED"

At this point there still remains an ample factor of safety—but it is good judgment to take the strap out of service.

"Klein-Kord" must not be confused with rubber transmission belting. In "Klein-Kord" the cross cords are extra strength so as to permit the use of the tongue type of buckle without risk of slipping or ripping under severe tension. (A friction buckle is unsuitable on a safety strap because the possibility of slip makes it decidedly objectionable.) When tested as in use a "Klein-Kord" Safety Strap will take a load of 2400 lbs. before ripping takes place at the tongue, which compares favorably with a high quality leather safety strap where ripping would probably occur at about 1750 lbs. The tensile strength per square inch of "Klein-Kord" is 5660 lbs. as against the usual specifications for first quality harness leather of 3500 lbs. In order to overcome any tendency to stretch, a leather strap 2 inches wide is frequently used. With "Klein-Kord" there is no appreciable permanent stretch, and we have found that a width of 1¾ inches provides a full factor of safety. For extra long wear all "Klein-Kord" safety straps are fitted with stainless steel reinforcements at buckle and fixed snap. We unhesitatingly recommend "Klein-Kord" Safety Straps to our men.

### ADVANTAGES

1. Guess work as to safe period of use eliminated.
2. Great tensile strength. Factor of safety—plus
3. Weatherproof.



CAT. No.	WEIGHT PER DOZ.
K.K.D.-025	¼ pint can . . . . . 4 lbs. 11 oz.

### "KLEIN-KORD" DRESSING

The life of "Klein-Kord" will be materially increased by dressing at intervals with "Klein-Kord" dressing. The first dressing should be applied as soon as the original rubber finish is worn from the surfaces—the fabric is then exposed so that it will absorb the dressing. Brush in a liberal first coat and allow to soak in and dry at room temperature for about an hour. Then apply a lighter second coat and do not use strap until thoroughly dry. This treatment will protect the fabric and provide a "slick" surface which in use will slide over the pole freely.

### CAUTION

Use special dressing only. Ordinary varnishes or lacquers are not satisfactory and may ruin your strap.

For the convenience of our customers we furnish "Klein-Kord" dressing in ¼ pint cans, with full directions for use as follows:

## KLEIN'S "KLEIN-KORD" SAFETY STRAPS—RED CENTER



No. KL-5233

CAT. No.	SIZE AND DESCRIPTION	WEIGHT PER DOZ.
KL-5233	1¾ in. x 5 ft. 8 in. "Klein-Lok" Snaps. Stainless Clips . . . . .	36 lbs.

(Other lengths can be furnished to order.)



No. 5233

CAT. No.	SIZE AND DESCRIPTION	WEIGHT PER DOZ.
5233	1¾ in. x 5 ft. 8 in. Standard Snaps. Stainless Clips . . . . .	36 lbs.

(Other lengths can be furnished to order.)



No. H-5233

CAT. No.	SIZE AND DESCRIPTION	WEIGHT PER DOZ.
H-5233	1¾ in. x 5 ft. 8 in. "Hank's" Snaps. Stainless Clips . . . . .	36 lbs.

(Other lengths can be furnished to order.)

("Hank's" Snaps must be used with corresponding "Hank's" "D" Rings on body belt.)

## KLEIN'S "KLEIN-KORD" SAFETY STRAPS

(Fixed Length Type)



No. 5234

On properties where there is no great variation of pole sizes the uniform strength of "Klein-Kord" fabric often makes it possible

to adopt a safety strap of fixed length. With conventional straps the greatest wear is usually close to the buckle. The fixed length strap avoids this due to the smooth way it moves on the pole.

We can furnish the above types of safety straps in any desired length to order.

CAT. No.	SIZE AND DESCRIPTION	WEIGHT PER DOZ.
KL-5234	1¾ in. x 56 in. (effective length) with "Klein-Lok" Snaps . . . . .	25½ lbs.
5234	1¾ in. x 56 in. (effective length) with Standard Snaps . . . . .	25½ lbs.
H-5234	1¾ in. x 56 in. (effective length) with "Hank's" Snaps . . . . .	25½ lbs.



# GENUINE KLEIN TOOLS

## KLEIN'S "KLEIN-KORD" EXTENSION STRAPS



No. 5236

CAT. No.	SIZE AND DESCRIPTION	WEIGHT PER DOZ.
KL-5236	1 3/4 in. x 15 in. with Standard "D" and "Klein-Lok" Snap	16 1/2 lbs.
5236	1 3/4 in. x 15 in. with Standard "D" and Standard Snap	16 1/2 lbs.
H-5236	1 3/4 in. x 15 in. with "Hank's" "D" and "Hank's" Snap	16 1/2 lbs.

The Extension Strap is used in conjunction with a fixed length Safety Strap. It provides the extra length necessary when working on

large diameter poles. May be worn on belt ready for immediate use or carried in truck.

## KLEIN'S BELT ACCESSORIES

Tape-Thong



No. 5130

Knife Snap



No. 5131

Ring



No. 5132

CAT. No.	DESCRIPTION	WEIGHT PER DOZ.
5130	Tape-thong with fiber cross bar	1 1/2 lbs.
5131	Knife Snap with strap and rivets	1 1/2 lbs.
5132	Ring with strap and rivets	1 1/2 lbs.

The Tape-thong illustrated above provides a convenient arrangement for carrying a roll of tape. The thong is pliable latigo leather 10 inches long x 3/4 inches wide, slit to form loops at both ends. One end is looped to a

fiber cross bar 3 1/4 inches long. The other loop may be attached readily to the belt. The Knife Snap and ring are both mounted on harness leather straps and come with rivets and burrs ready for attaching to belt.

## KLEIN'S CANVAS "TOOL-PACK"



No. 5139

Every mechanic will recognize the advantages of the "Tool Pack." It is a sturdy, brown, canvas bag, approximately 6" x 12". A heavy zipper instantly opens or closes the full length mouth. Just the thing to keep a selection of frequently used small tools separated where they can be found at once—no "digging" around in the big bag. Plenty of room for pliers, small screwdriver, drill, wrenches, etc. You'll wonder how you got along without it.

CAT. No.	SIZE	WEIGHT PER DOZ.
5139	6 in. x 12 in.	3 lbs.

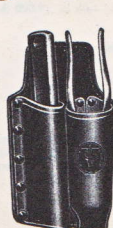
## KNIFE POCKET



CAT. No.	SIZE	WEIGHT PER DOZ.
5163	3"x4"	4 lbs.

This harness leather pouch is made specially for the No. 1560-3 Skinning Knife. It can be carried in the hip pocket or riveted to belt as preferred. Lock stitched with genuine hot waxed linen thread. An opening at bottom of the pouch prevents accumulation of water or dirt. This pouch provides a safe method for carrying a useful knife.

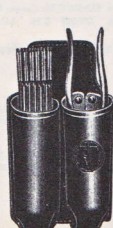
## COMBINATION TOOL POCKETS



5118-K



5118-S



5118-R

CAT. No.	SIZE AND DESCRIPTION	WEIGHT PER DOZ.
5118-K	4 1/4"x8" For Plier and Knife	7 1/2 lbs.
5118-S	4"x8" For Plier and Screwdriver	5 1/2 lbs.
5118-R	4 1/4"x8" For Plier and 6 ft. Rule	7 1/2 lbs.

These pockets are made of heavy harness leather. Opening at bottom prevents accumulation of dirt or water. Top flap of double

thickness leather for riveting to belt. The plier compartment fits 6, 7, 8, and 9 inch side cutting plier.)

## HIP POCKET TOOL CASE



CAT. No.	SIZE	WEIGHT PER DOZ.
5111	5 in. x 7 in.	5 1/2 lbs.

For carrying pliers or other tools in hip pocket. Prevents cutting of clothes, or possible injury to the person. Made of black leather.

## DETACHABLE HOLSTER



CAT. No.	SIZE	WEIGHT PER DOZ.
5116	10 in. long	6 lbs.

Made of heavy harness leather with loop to slip over belt. Carries 6, 7, 8, or 9 inch side cutting pliers. Mouth of pocket framed to hold open position permanently.

## PLIER POCKETS



No. 5107

CAT. No.	SIZE	WEIGHT PER DOZ.
5107	3 1/2 in. x 8 1/2 in.	3 lbs.

Made of a good quality leather. For carrying 6, 7, 8, or 9 inch pliers when at work. Has slits through which belt may be inserted or can be riveted on.

CAT. No.	SIZE	WEIGHT PER DOZ.
5112	3 1/2 in. x 9 in.	4 1/4 lbs.

Similar to No. 5107 except plier does not protrude. Bottom is left open to prevent collection of dirt, etc. A loop is riveted at back through which belt may be passed or can be riveted on.



No. 5112

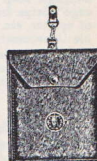
## POUCH FOR RUBBER GLOVES

CAT. No.	SIZE	WEIGHT PER DOZ.
5120-9	7 1/2 in. x 9 in. deep	4 1/2 lbs.

Scotch chrome leather pocket for carrying rubber gloves (folded). Comes equipped with snap and "D" ring, ready to attach to body belt.

CAT. No.	SIZE	WEIGHT PER DOZ.
5120-15	7 1/2 in. x 15 in. deep	7 lbs.

Same as above but larger to accommodate gloves without folding.



## INSPECTOR'S HARNESS LEATHER TOOL BAG



No. 5108

CAT. No.	SIZE	WEIGHT EACH
5108-14	14x8 inches	5 lbs.
5108-16	16x8 inches	5 3/4 lbs.
5108-18	18x8 inches	6 lbs.
5108-20	20x8 inches	6 1/2 lbs.
5108-22	22x8 inches	7 lbs.
5108-24	24x8 inches	7 1/4 lbs.

This bag offers a combination of good features. It is made of harness leather and will stand rough and hard usage and still always look well. It has a shoulder strap combined with a pad and hand strap. The bottom is three ply and is protected with steel studs. Retaining straps pass clear around the bag so that it may be loaded to the limit of its capacity and be securely held intact. All seams are sewed with hot waxed linen thread, lock stitched. The leather used does not absorb moisture.

## LINEMEN'S CANVAS TOOL BAG, LEATHER BOTTOM

These bags are made of one piece of white duck reinforced all around the bottom with heavy bag leather, 3/4 inches up on the 5102 series, 8 inches up on the 5105 series. The bottom is made of heavy leather outside and duck inside, lock stitched all around. The bottom is protected with strong steel studs.

Bottoms and sides are joined together with lock stitched leather welt seams. Mouth of the bag is formed by a 12-gauge steel frame; the canvas is clinched between this frame and an inside secondary steel frame. Has harness leather handles and two retaining straps with buckles.



No. 5102

CAT. No.	SIZE	WEIGHT EACH
5102-12	12-inch	2 1/4 lbs.
5102-14	14-inch	2 1/2 lbs.
5102-16	16-inch	3 lbs.
5102-18	18-inch	3 1/4 lbs.
5102-20	20-inch	3 1/2 lbs.
5102-22	22-inch	3 3/4 lbs.
5102-24	24-inch	4 lbs.

The above bags can be furnished with lock and key, also shoulder strap to order at slight additional cost.



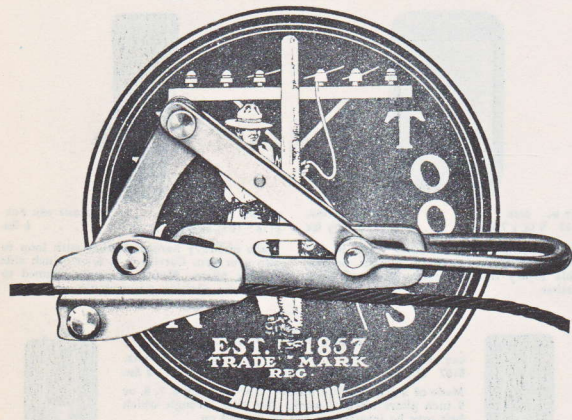
No. 5105

CAT. No.	SIZE	WEIGHT EACH
5105-16	16-inch	3 lbs.
5105-18	18-inch	3 1/2 lbs.
5105-20	20-inch	3 3/4 lbs.
5105-22	22-inch	4 lbs.
5105-24	24-inch	4 1/4 lbs.



# GENUINE KLEIN TOOLS

## KLEIN'S "CHICAGO" GRIPS



Construction engineers are more and more demanding grips which will neither slip nor damage the conductor or strand under heavy loads. These requirements have been met by welding a lining of bronze into the jaws of standard "Chicago" Grips.

To insure maximum efficiency and avoid slippage, keep the grooves of jaws of "Chicago" Grips free of grease, oil, accumulation of spelter, etc. (Use emery paper or fine cut file if necessary.)

Main body piece and lever are forged steel. Draw parts are of wrought steel. Gripping jaws are machined smooth. Rivets are machine turned and workmanship throughout is first class.

### To Decide on Size Grip Required

Consult reference tables in the back of this catalog giving diameters of solid wires and also copper and aluminum strands in general

use. For your convenience there is also a table giving decimal equivalents of fractions. (Page 84.)

If you cannot decide on grip for your purpose send us full particulars with outside diameter of wire or strand and we will advise promptly.

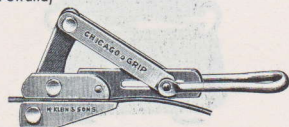
Once these grips seize the wire they hold on with the tenacity of a bull dog. The harder the pull, the tighter the hold. Pulls straight without leaving kinks in the wire. Handy to put on and holds in place by means of a spring acting on the compressing lever. A noteworthy feature is the arrangement of the draw link so that it does not hang down at right angles, and is therefore not in the way of the line when the grip is put on.

In the following listings Grips with bronze lined jaws are indicated by the letter "B" after the catalog number. (Thus 1628-5B.)

## KLEIN'S "CHICAGO" GRIPS FOR BARE WIRES

(Solid and Strand)

The 1613 series is constructed as above described with the plain type of jaw as suited for bare wire.

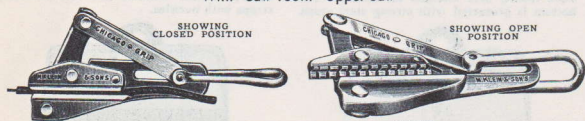


CAT. No.	MAXIMUM WIRE SIZE	MINIMUM WIRE SIZE	APPROX. MAX. OPENING	SAFE LOAD	WEIGHT EACH	SIZE No.
1613-30	No. 6 B. & S. Solid (.162")	No. 12 B. & S. Solid (.081")	.22 in.	1,500 lbs.	1 1/2 lbs.	1
1613-30B	As above but bronze lined jaws.					
1613-40	No. 0 B. & S. Strand (.373")	No. 10 B. & S. Solid (.102")	.44 in.	2,250 lbs.	3 lbs.	2
1613-40B	As above but bronze lined jaws.					
(1613-40, 1613-40B supersede previous Nos. 1613-40A and 1613-40AB.)						
1613-50	No. 4/0 B. & S. Solid (.460")	No. 6 B. & S. Solid (.162")	.52 in.	4,000 lbs.	8 lbs.	3
1613-50B	As above but bronze lined jaws.					
1613-50A	No. 4/0 B. & S. Strand (.552")	No. 6 B. & S. Solid (.162")	.62 in.	4,000 lbs.	8 lbs.	3A
1613-50AB	As above but bronze lined jaws.					

Bronze lining of jaws prevents slippage and consequent surface abrasion of conductor or strand.

## KLEIN'S "CHICAGO" GRIPS FOR INSULATED WIRE

With "Saw Tooth" Upper Jaw



CAT. No.	MAXIMUM WIRE SIZE	MINIMUM WIRE SIZE	APPROX. MAX. OPENING	SAFE LOAD	WEIGHT EACH	SIZE No.
1611-20	No. 4 B. & S. Weatherproof Solid (.391")	No. 10 B. & S. Weatherproof Solid (.250")	.50 in.	2,200 lbs.	3 lbs.	6
1611-30	No. 1 B. & S. Weatherproof Solid (.500")	No. 6 B. & S. Weatherproof Solid (.315")	.56 in.	3,500 lbs.	3 3/4 lbs.	4
1611-40	No. 2/0 B. & S. Weatherproof Strand (.672")	No. 1 B. & S. Weatherproof Solid (.500")	.75 in.	3,750 lbs.	7 3/4 lbs.	5
1611-50	No. 4/0 B. & S. Weatherproof Strand (.860")	No. 2/0 B. & S. Weatherproof Strand (.672")	.94 in.	3,750 lbs.	7 3/4 lbs.	5A

(Supersedes 1611-ST series.)

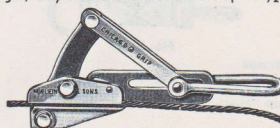
The 1611 series is similar to the 1613 series in construction but the necessary extra width in the jaws is "lipped" out to avoid unnecessary weight. The upper jaw has "saw-tooth" gripping notches.

The 1611 Series of Grips can be furnished with bronze lined jaws to special order. (Order as 1611-20B, 1611-30B, etc.)

## KLEIN'S IMPROVED "CHICAGO" GRIP

THE "ALL PURPOSE" TOOL

For Messenger, Guy Strand and Conductors up to 1/2 in. Diameter



No. 1628-5-B

CAT. No.	MAXIMUM CABLE SIZE	MINIMUM CABLE SIZE	APPROX. MAX. OPENING	SAFE LOAD	WEIGHT EACH
1628-5B	With bronze lined jaws 4/0 B. & S. 7 Strand Copper (.522") 3/0 A.C.S.R. (.502")	No. 4 B. & S. Solid Copper (.202") No. 6 A.C.S.R. (.178")	.58 in.	8,000 lbs.	6 lbs.

1628-5 As above but without bronze lining in jaws.

The above grip has been designed to provide in one tool a grip to handle almost every requirement on the usual job.

The jaws have been lengthened and the leverage increased. No. 1628-5B has bronze-lined jaws to prevent slippage and conse-

quent damage to galvanized finish or to copper or aluminum conductors.

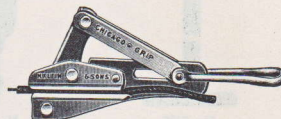
For "all purposes" on any strand or solid wire up to 1/2 inch diameter with load up to 8000 lbs. Weighs only 6 lbs.

Forged from Alloy Steel—heat treated.

## KLEIN'S "CHICAGO" GRIPS FOR STRANDED CONDUCTORS

The 1626 series is similar to the 1613 series construction but the necessary extra width in the jaws is "lipped" out to avoid unnecessary weight. Both gripping jaws are smooth.

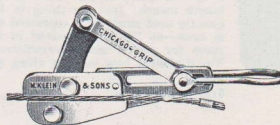
NOTE: Grips for other size Cables made to order.



CAT. No.	MAXIMUM CABLE SIZE	MINIMUM CABLE SIZE	APPROX. MAX. OPENING	SAFE LOAD	WEIGHT EACH
1626-39	300,000 C.M. A.C.S.R. (.480") 350,000 C.M. Copper (.479")	3/0 A.C.S.R. (.502") 4/0 Copper Strand (.522")	.75 in.	3,750 lbs.	7 1/2 lbs.
*1626-39B	As above but bronze lined jaws.				
1626-40	500,000 C.M. A.C.S.R. (.404") 400,000 C.M. Copper (.491")	4/0 A.C.S.R. (.563") 350,000 C.M. Copper (.575")	.97 in.	3,750 lbs.	7 1/2 lbs.
*1626-40B	As above but bronze lined jaws.				
*1626-AB	Furnished to order. Forged from Alloy Steel—Heat Treated Bronze-lined jaws.				
	300,000 C.M. A.C.S.R. (.480") 350,000 C.M. Copper (.479")	3/0 A.C.S.R. (.502") 4/0 Copper Strand (.522")	.75 in.	8,000 lbs.	7 1/2 lbs.

\*Bronze lining of jaws prevents slippage and consequent surface abrasion of cable.

## KLEIN'S "CHICAGO" GRIPS FOR MESSENGER AND GUY STRAND, HEAVY CABLES, WIRE ROPE, ETC.



CAT. No.	MAXIMUM CABLE SIZE	MINIMUM CABLE SIZE	APPROX. MAX. OPENING	SAFE LOAD	WEIGHT EACH
1628-6	7/16" Galvanized Steel Strand (.438") No. 2/0 B. & S. Copper Strd. (.414") No. 1/0 A.C.S.R. (.398")	3/16" Galvanized Steel Strd. (.188") No. 5 B. & S. Copper Solid (.182") No. 7 A.C.S.R. (.177")	.50 in.	8,000 lbs.	8 1/2 lbs.
1628-6B	As above but bronze lined jaws for stranded conductors.				
1628-16	3/8" Galvanized Steel Strand (.625") No. 300,000 C.M. Copper Strd. (.629") No. 4/0 A.C.S.R. (.563")	5/16" Galvanized Steel Strd. (.312") No. 1/0 B. & S. Copper Solid (.325") No. 2 A.C.S.R. (.316")	.69 in.	15,000 lbs.	15 1/2 lbs.
1628-16B	As above but bronze lined jaws for stranded conductors.				
1628-16BP	As 1628-16 but jaws extra width and bronze lined—for larger cables. No. 550,000 C.M. Copper Strd. (.853") No. 477,000 C.M. A.C.S.R. (.883")	No. 1/0 B. & S. Copper Solid (.325") No. 2 A.C.S.R. (.316")	1.06 in.	15,000 lbs.	17 lbs.

Bronze lining of jaws prevents slippage and consequent surface abrasion of strand.

These grips successfully fill a long felt want taking the heavy loads incident to larger strands without injury to the strand itself. Forged from alloy steel heat treated. Gripping jaws are machined smooth. Rivets are

machine turned and workmanship throughout is first class.

These grips frequently can be modified to accommodate cables of larger diameters. Write us on your special requirements.

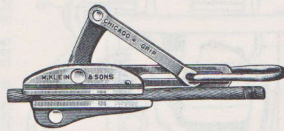
Whether used on solid or strand (galvanized, copper or aluminum) it is always important to keep the jaws of grips clean and free from any grease, accumulation of spelter or other metal which may be deposited in the grooves. This will prevent slippage and insure full efficiency.



# GENUINE KLEIN TOOLS

## KLEIN'S "CHICAGO" GRIP

For Hollow Core and other large diameter Conductors and Cables



CAT. No.	MAXIMUM CABLE SIZE	MINIMUM CABLE SIZE	APPROX. MAX. OPENING	SAFE LOAD	WEIGHT EACH
1628-30B	1,000,000 C.M. Hollow Conductor (1.257")	350,000 C.M. Hollow Conductor (1.00")	1.35 in.	20,000 lbs.	28 lbs.
	1,250,000 C.M. Copper Strand (1.288")	550,000 C.M. Copper Strand (.853")			
	1,033,500 C.M. A.C.S.R. (1.246")	477,000 C.M. A.C.S.R. (.883")			
1628-40B	1,250,000 C.M. Hollow Conductor (1.430")	1,000,000 C.M. Hollow Conductor (1.257")	1.60 in.	25,000 lbs.	32 lbs.
	1,750,000 C.M. Copper Strand (1.525")	1,250,000 C.M. Copper Strand (1.288")			
	1,590,000 C.M. A.C.S.R. (1.545")	1,033,500 C.M. A.C.S.R. (1.246")			

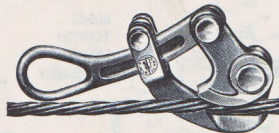
Bronze lining of jaws prevents slippage and consequent surface abrasion of conductor.

In the case of hollow conductors and other large diameter cables the jaws of the grip must be shaped to provide maximum enclosure and contact with the circumference of the cable itself. When so made the grip will function at maximum efficiency. Slippage is prevented and danger of crushing or collapsing

hollow conductors is avoided. For the above reasons we hold the grips in blank and finish as necessary for any particular requirement.

These Grips are forged from alloy steel—heat treated. The jaws are bronze lined.

## KLEIN'S "HAVEN'S" STEEL GRIPS



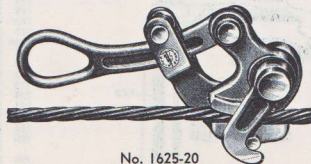
No. 1604-20

CAT. No.	APPROXIMATE MAX. OPENING	APPROXIMATE MIN. OPENING	DESCRIPTION	SAFE LOAD	WEIGHT PER DOZ.
1604-10	15/64 in. (.24 in.)	1/16 in. (.06 in.)	For No. 4 B & S wire and smaller	2000 lbs.	12 lbs.
1604-20	17/32 in. (.53 in.)	9/64 in. (.14 in.)	For 1/2 in. wire and smaller	5000 lbs.	28 1/2 lbs.

These popular grips have been improved in design and materials. All parts solid steel drop forgings, heat treated as necessary for maximum strength and service. The eye is pear shaped (3/8 inch and 1 1/8 inch wide respectively) and a roller fitted to the body

yoke makes the motion free and allows the load to come on smoothly. Instantaneous hold, yet a shake on the tackle rope releases the grip. These grips will not slip due to the hand cut serration in the face of the eccentric. Galvanized finish.

## KLEIN'S IMPROVED "HAVEN'S" GRIP



No. 1625-20

CAT. No.	APPROXIMATE MAX. OPENING	APPROXIMATE MIN. OPENING	DESCRIPTION	SAFE LOAD	WEIGHT PER DOZ.
1625-20	25/32 in. (.78 in.)	7/32 in. (.22 in.)	For wires 3/4 in. to No. 6 B & S	8000 lbs.	45 lbs.

This grip is another improved design. All the desirable features have been retained, but by the use of alloy steel drop forgings properly heat treated the weight has been reduced over forty per cent at the same time the safe load rating has been increased sixty per cent. Suitable for use on solid or strand wires. The swing latch engages stud on the lower jaw preventing any distortion of the body or cross bolt under load. This grip is a favorite for use on trolley wire and weatherproof. It can be readily adapted at

slight extra cost for hot line work on weatherproof (insulated) conductors. The swing latch holds the tool on the line in position for the pull.

The handle or draw piece works smoothly against steel roller set in yoke of body arm. The eye is pear shaped 1 1/4 inch wide, permitting use of oversized sister hook on the tackle. Hand cut serration in face of eccentric assures a hold that cannot slip. Almost automatic in action. Galvanized finish.

## Tackles and Hand Lines

### KLEIN'S HOWES WIRE TOOLS



No. 1702

The swivel hook is forged steel with an opening large enough to go 'round an insulator

pin or other convenient object. The shank of hook is lengthened out so as to reach under D. P. insulator when necessary. The forward end has a locking device to hold the load at any distance. It is arranged so that a grip can be attached. All metal parts are galvanized finish.

CAT. No.	SIZE	WEIGHT EACH
1702-20	Single purchase. Strap 1 1/4-inch wide, 7 ft. long	2 1/2 lbs.

### KLEIN'S "CHICAGO" LINEMEN'S TOOL



No. 1700-30

CAT. No.	For No. 6 wire and smaller down to No. 13	WEIGHT EACH
1700-30		4 lbs.

This set is a combination of "Chicago" Grip No. 1613-30 with Howes Wire Tool No. 1702-20. It is largely used by telephone companies. Detailed description of Grip and Wire Tool are given under their individual catalog numbers.

Other sizes of grips can be furnished in this combination to order only.

### KLEIN'S SELF-LUBRICATING HEAVY BLOCK TACKLES



No. 1802

CAT. No.	DESCRIPTION	WEIGHT EACH
1802-40	Furnished with 30 ft. of 1/2-in. best quality Manila rope, 4 strand	15 1/2 lbs.
1802-50	As above with 5/8-in. rope	17 3/4 lbs.
1802-60	As above with 3/4-in. rope	19 1/2 lbs.

Other lengths of rope furnished to order.

Consists of two special double sheave blocks. The spring guarded snap hooks and eye are drop forgings. The side plates are wrought. Pulleys are bronze bushed and self lubricating. Galvanized finish. The rope used is best quality Manila four strand, spliced to eye of block with galvanized thimble. Runs free and does not twist in the way cheaper ropes do.

### KLEIN'S SELF-LOCKING BLOCK TACKLE



No. 1802

Consist of light steel shell blocks galvanized, fitted with a snubbing hook to lock load in any position. This is a great convenience and time-saver for the man on the pole. Also in handling a vertical load. To lock the load, simply pull the luff rope under the hook. To release, simply pull the rope. The blocks are arranged with spring guard snap hooks. When pulling up wire to make a splice it may be used with two grips attached to the snaps, or with the drop forged hook No. 258 to anchor to an insulator-pin or other con-

venient anchorage. (The hook is specially shaped to fit under D. P. insulator on cross arm.) The rope is best quality and will not twist as the cheaper grades do. (Shipped un-assembled.)

CAT. No.	DESCRIPTION	WEIGHT EACH
1802-30	Furnished with 25 ft. 3/4-in. 4 strand Manila rope and detachable anchor hook (*No. 258)	3 lbs.

### KLEIN'S SELF-LOCKING BLOCK TACKLE

(With Guarded Snaps)

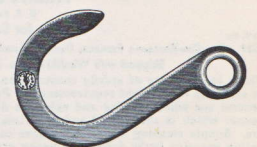


No. H-1802

The No. H-1802-30 set of blocks is identical with the No. 1802-30 set described above except that the snaps are "guarded." To accomplish this feature the nose of each hook has been lengthened to extend over the latch or keeper. This does away with any necessity of taping the snaps after come-a-long has been engaged.

CAT. No.	DESCRIPTION	WEIGHT EACH
H-1802-30	Furnished with 25 ft. 3/4-in. 4 strand Manila rope and detachable hook (*No. 258)	3 1/2 lbs.

### KLEIN'S ANCHOR HOOK FOR TACKLES



No. 258

This hook is a solid steel drop forging. It is approximately 5 1/2 inches overall length x 3 3/4 inches across the hook. The eye has an inside diameter of 5/8 inch to engage with snap on Klein Tackles 1802-30 and H1802-30. Galvanized finish. Specially shaped to slip under D. P. insulator and engage insulator pin on cross arm.

CAT. No.	DESCRIPTION	WEIGHT PER DOZ.
*258	Drop Forged Hook. 2 in. Opening. 5/8 in eye	4 lbs.



# GENUINE KLEIN TOOLS

## KLEIN'S HAND LINE

With Drop Forged Snap Hook No. 443-A



No. 1803

CAT. No. 1803-60 With 75 ft.  $\frac{3}{4}$ -in. best quality Manila rope, 4 strand and No. 443-A Snap . . . . . 3 1/2 lbs.  
1803-120 As above with 120 ft. of rope and No. 443-A Snap . . . . . 5 1/4 lbs.

These lines are designed for maximum safety and service. The rope is best quality and does not twist. It will far outlast cheaper material. Spliced to eye of snap hook with galvanized steel thimble. The snap hook is drop forged and similar to those used on

safety straps except that it has round eye. It opens to  $\frac{3}{4}$  inch.

Can be furnished with any different length of rope to order.

(For details of snap see next item.)

## KLEIN'S SNAP FOR HAND LINES AND LIGHT HOISTS



No. 443-A

CAT. No. 443-A Forged Snap. Eye 1-1/16 in. I. D. Length overall 5 1/2 in. . . . . 6 1/2 lbs.

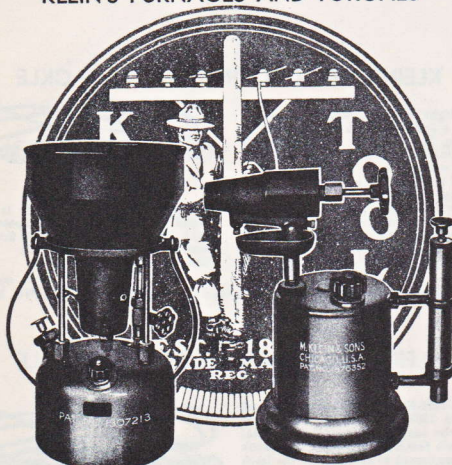
This snap is used on hand lines, 1803 series. It will be found a real convenience for many uses. Can be used on all light hoisting—for roofers, etc. Galvanized Finish. The hook and eye are an integral drop forging. Duck bill nose closes around latch.

Will carry loads up to 1250 lbs.

When fitted to a 4 inch tackle block this hook provides an ideal means for connecting with come-along; no taping is necessary.

The opening will take up to  $\frac{3}{4}$  inch.

## KLEIN'S FURNACES AND TORCHES



Construction throughout is sturdy and simple. The materials are the best. The principal consideration in the production of these tools has been to meet the exacting requirements of utility companies with maximum safety.

The Klein Furnaces operate on either gaso-

line or kerosene without any change of parts. Once accepted as standard a small stock of replacement parts will enable a handy man to maintain the equipment in service without the interruptions and expense necessary if return to factory were required.

## KLEIN'S FURNACE

U. S. Patent No. 1,307,213  
Made for Safety and Service

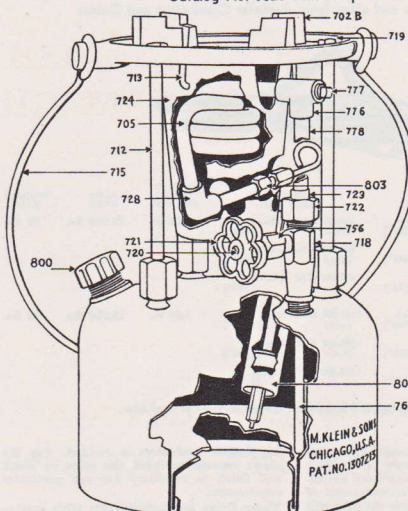
CAT. No. 3529 Gasoline-Kerosene Furnace, Pump in fount with windshield No. 3010 . . . . . 20 1/2 lbs.  
Shipped with Windshield No. 3010 as shown unless otherwise ordered.

These furnaces are of sturdy construction with a minimum of parts and are especially made to stand up to the field requirements of Public Utility Companies. They are well suited for general use where quality and safety is desired. Quick starting is ensured by multi-coil burner which is economical and vaporizes the fuel thoroughly, producing an intensely hot fire. Simple cleaning device to remove carbon deposit without taking burner apart. One gallon capacity tanks formed of heavy gauge steel with bottom rolled in — no chance for leaks due to wear. All fittings brazed. Furnished with pump in fount. These furnaces are used exclusively by many of the largest properties.

Either gasoline or kerosene may be used without making any change in burner.

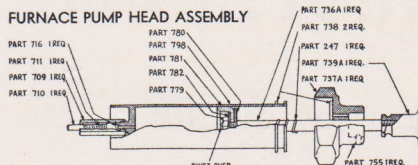
## LIST OF PARTS FOR KLEIN'S FURNACES

Catalog No. 3529 with Pump in Fount



KLEIN FURNACE ASSEMBLY

### FURNACE PUMP HEAD ASSEMBLY



RIVET OVER

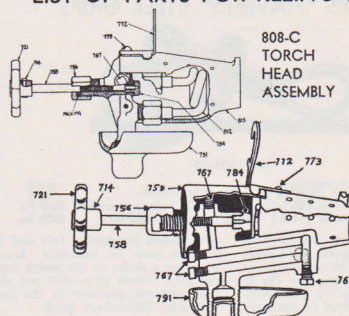
- Part No.
- 247 Spring
  - 702B Top plate
  - 703 Burner Tube and Nut (welded)
  - 705 Generator Coil
  - 709 Air Valve Cork Shell
  - 710 Air Valve Container Guide
  - 711 Air Valve Compression Spring
  - 712 Uprights
  - 713 Studs
  - 714 R. H. Rivet ( $\frac{1}{4}$  x  $\frac{5}{8}$ )
  - 715 Handle Rod
  - 716 Air Valve Cork
  - 718 Feed Valve Body
  - 719 Upright Hex. Nut
  - 720 Feed Valve Stem
  - 721 Handle Wheel
  - 722 Female Connection
  - 723 Male Connection
  - 724 Coil Cup
  - 728 Elbow
  - 736A Pump Cylinder Rod
  - 737A Pump Cylinder Cap
  - 738 Pump Fibre Washer
  - 739A Pump Button
  - 756 Torch Head and Feed Valve Packing Nut
  - 769 Intake Feed Tube
  - 775 Filler Cap Cork Washer
  - 776 Galvanized Tee
  - 777 Pipe Plug
  - 778 Galvanized Nipple
  - 779 Hexagon Nut
  - 780 Steel Washer
  - 781 Leather Washer
  - 782 Washer
  - 797 Hexagon Iron Nut
  - 798 Pump Cylinder and Check Bottom Assembly
  - 799 Fibre Washer
  - 800 Filler Cap and Plug Assembly
  - 802 Feed Valve Body and Wheel Assembly
  - 803 Burner Assembly
  - 804A Furnace Pump with Locking Device Assembly
  - 805 Orifice Cleaning Needle Assembly
  - 815 Generator Coil Assembly Complete

WHEN ORDERING SPECIFY PART NUMBER OF PIECE REQUIRED

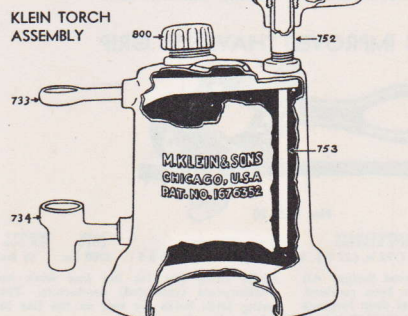
## LIST OF PARTS FOR KLEIN'S TORCHES

Catalog No. 3428 with Pump in Handle

Catalog No. 3428-C with Pump in Handle and Coil in Torch Head



KLEIN TORCH ASSEMBLY



TORCH PUMP ASSEMBLY

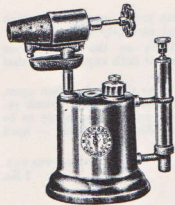
- Part No.
- 247 Spring
  - 709 Air Valve Cork Shell
  - 710 Air Valve Container Guide
  - 711 Air Valve Compression Spring
  - 714 R. H. Rivet ( $\frac{1}{4}$  x  $\frac{5}{8}$ )
  - 716 Air Valve Cork
  - 721 Hand Wheel
  - 733 Handle Bar Casting—Upper
  - 734 Handle Bar Casting—Lower
  - 739A Pump Button
  - 752 Feed Nipple
  - 753 Intake Feed Tube
  - 754 Torch Head
  - 756 Torch Head and Feed Valve Packing Nut
  - 758 Torch Head Stem
  - 759 Torch Head Windshield
  - 763A Pump Top End Piece
  - 767 Brass Set Screws
  - 768A Pump Rod
  - 771 Brass Washer
  - 772 Soldering Iron Holder
  - 773 Brass Screw
  - 775 Filler Cap Cork Washer
  - 779 Hexagon Nut
  - 783 Brass Burr
  - 784 Torch Head Burner Tip
  - 785 Leather Washer
  - 786 Pump Cylinder and Check Bottom Assembly
  - 791 Generator Cup
  - 800 Filler Cap and Plug Assembly
  - 807A Torch Pump with Locking Device Assembly
  - 808 Torch Head, Regular, Complete
  - 808C Torch Head with Coil, Complete
  - 812 Torch Head Coil Assembly
  - 813 Torch Head Nozzle

WHEN ORDERING SPECIFY PART NUMBER OF PIECE REQUIRED



# GENUINE KLEIN TOOLS

## KLEIN'S TORCHES



U.S. PAT. NO. 1676,352  
No. 3428

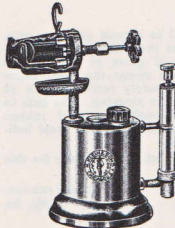
CAT. No. SIZE WEIGHT EACH  
3428 One Quart. Pump built in . . . . . 5½ lbs.

Specially designed for requirements of Public Utility Companies, at the same time a most satisfactory torch for general use.

Has double length generating channels for quick starting. Flame is intensely hot, easily regulated from minimum to full blast.

Will not back generate. Clean out plugs at all angles. Needle has positive shoulder stop which prevents damage to burner by enlarging orifice.

Pump well made and sturdy. Tank heavy gauge copper. Capacity one quart.



No. 3428-C

CAT. No. SIZE WEIGHT EACH  
3428-C One Quart. Pump built in . . . . . 5½ lbs.

This torch is similar in construction to No. 3428, but has different head with coil burner. "Carbon Choke" nuisance is done away with. Fuel vaporizes rapidly so it burns as a dry gas with intensely hot flame.

For outdoor use this torch is ideal—will not blow out even in a gale of wind.

The burner coil and burner tip are both readily replaceable at slight expense.

## KLEIN'S TORCH HEAD (COIL)

CAT. No. WEIGHT EACH  
808-C Complete . . . . . 1½ lbs.

This assembly comes complete ready to install on conventional torch and convert it into a "coil burner" with all the advantages of this construction.

## SHIELD FOR KLEIN FURNACE

(One of these shipped with each furnace unless ordered otherwise.)

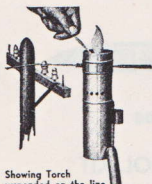


Made of heavy gauge sheet steel. The top edge is rolled and the bottom is reinforced with a heavy ring. All joints welded. Diameter at top 9 inches.

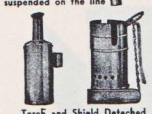
CAT. No. WEIGHT EACH  
3010 For Furnace No. 3529 . . . . . 3 lbs.

## "STAYSALITE" LINEMEN'S TORCH

The "Staysalite" Torch has these main features:



Showing Torch suspended on the line



Torch and Shield Detached

It "Staysalite" in a wind. It is light; it is small. It is lit and extinguished in a moment, as wanted. It burns alcohol without odor or noise. It has no adjusting parts, therefore it cannot get out of order. It is carried in the linemen's belt and does away with the ground man. It is hung directly on the wire under the joint to be soldered. It can be used as a small heater or soldering iron. It is provided with a cup for holding soldering paste.

This Torch is the invention of a practical, experienced telephone man. For hot work within the range of the light work of the telephone or telegraph lineman, house wireman and general shop man it is a boon.

To suspend the torch on a wire under a joint, place the wire in the slots on the upper edge of the rim, give the body of the torch a half turn and it's on; when through, give it a half turn in the opposite direction and it's off. Drop it back in your belt by means of the hook and you are free for the next thing in line. In general use by many of the largest utility corporations in the country.

CAT. No. WEIGHT EACH  
3420 . . . . . 1¼ lbs.

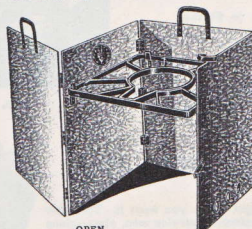
## FOLDING WINDSHIELDS

This shield is a folding design made of heavy galvanized sheet steel in four leaves each 24" high by 18" wide hinged together, the hinges being securely riveted. The grate is made of ¾" x ¾" steel, welded and swings on one leaf of the shield.

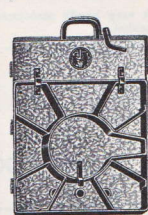
In use this grate is brought up to a horizontal position where it is held firmly in two clips riveted to the leaf of the shield opposite the one from which it is permanently suspended.

All hinges, handles, lugs and brackets are riveted and cannot come loose. The grate is designed so that it can be used with melting pot or the larger sizes of wax kettles. The shield can be folded as shown for convenience in transportation and when closed is held in place by a swing latch at the top.

CAT. No. 3020 Folding Windshields for use with furnaces. 24 in. high x 18 in. square, with welded grate. 42 lbs.



OPEN



CLOSED

This shield is recommended not only to improve the burning of the furnace by protecting it from wind, but also because it provides a means of safety to the public when furnaces are being operated in crowded districts.

WEIGHT EACH

## KLEIN'S COMBINATION STEEL LAG SCREW WRENCH



CAT. No. SIZE WEIGHT PER DOZ.  
3109-20 13½-inch . . . . . 24 lbs.

This wrench is forged from select bar steel. The slot is formed in a cross shape and will fit machine bolts, nuts or lag screws from ¾ inch to ¾ inch. The small end of the wrench is arranged for square nuts on ¼ inch machine or carriage bolts. The round hole allows the end of a bolt to come through as

the nut is run on. The jaw is wider at its lower portion than at the entrance and when this wrench is put on a nut or bolt the tendency is to draw the bolt-head or nut into the wrench and prevent slipping off, a most desirable advantage original with this wrench and a real "safety" feature.

## KLEIN'S LINEMAN'S WRENCH

"Bell System" Type



CAT. No. SIZE WEIGHT PER DOZ.  
3146 13-inch, for ¾ in. hardware . . . . . 23 lbs.

This wrench is forged of select bar steel, heat treated, and is of the open end type with two openings of different size at each end.

There is a hole provided at the larger end so that the wrench may be used for turning in standard pole steps.

This wrench is particularly adapted for use on the heavier 3-bolt guy clamps on which

the clearance for a wrench is limited and is generally suitable for ¾ inch hardware.

Openings:  
Large end 1½ inch and 1¼ inch  
Small end 1¼ inch and ¾ inch  
(For ¾ inch through bolt, ½ inch lag screw, ¾ inch carriage bolt, ½ inch and ¾ inch guy clamps.)

## KLEIN'S LINEMAN'S WRENCH



CAT. No. SIZE WEIGHT PER DOZ.  
3146-A 13-inch, for ¾ in. hardware . . . . . 23 lbs.

Same as No. 3146 but modified for ¾ inch hardware.

Openings:  
Large end 1½ inch and 1¼ inch  
Small end ¾ inch and ¾ inch

(For ¾ inch and ¾ inch through bolt, ½ inch lag screw, ¾ inch carriage bolt, ½ inch and ¾ inch guy clamps.)

## KLEIN'S "CHICAGO" FISH-TAPE PULLER

Patent No. 1,628,744

Here is a simple, husky come-along for Fish-Tape.

To engage puller on fish-tape place the tape sideways in slot and give puller a slight forward motion while pushing tape deeper into the slot. (This slips tape under the ratchet wheel.) Now pull. You have a positive grip on the tape. Slide forward on tape to position for new bite.

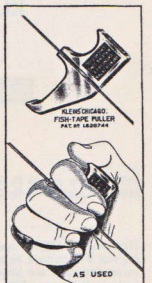
Klein's "Chicago" Fish-Tape Puller grips like a vise—never slips—simple, strong, automatic.

Does not injure the tape, 3¾ inches long, can be carried in the pocket.

Saves time and protects the hand.

(We do not supply Fish-Tape.)

CAT. No. WEIGHT PER DOZ.  
1629 For Standard Fish Tapes . . . . . 2½ lbs.  
1629-A Modified for No. 12 Iron Wire . . . . . 2½ lbs.



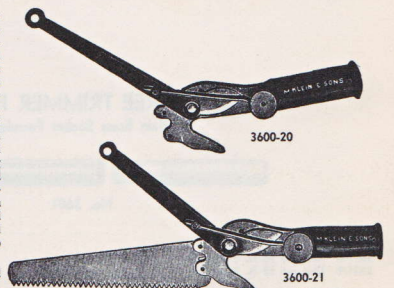
AS USED

## KLEIN'S "FAVORITE" TREE TRIMMER HEAD

This trimmer, as its name implies, is a favorite among users. The head is one piece and comprises the hook portion with which the knife engages and the socket into which the handle is inserted. This socket is perfectly straight, eliminating the necessity of tapering the end of the handle. The knife is forged from tool steel and is integral with the lever and the cutting edge is carefully tempered and ground making it very effective. This trimmer will sever a 1-inch branch. The knife is held open by a flat steel spring and is operated by a rope attached to the end of the lever.

Two threaded holes are provided for attaching a saw. See cut No. 3600-21.

CAT. No. SIZE WEIGHT EACH  
3600-20 Head only. No saw, rope or handle . . . . . 17" 3½ lbs.  
3600-21 Head with straight saw. No rope or handle . . . . . 23" 4 lbs.  
3600-22 Head with curved saw. No rope or handle . . . . . 26" 4½ lbs.



3600-21

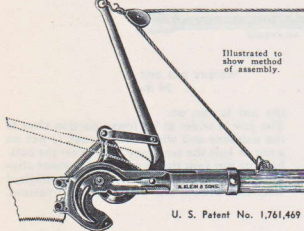
(Shown with Straight Saw)



# GENUINE KLEIN TOOLS

## No. 3628 KLEIN'S TREE TRIMMER HEAD

ROTARY KNIFE



The design of this trimmer differs from any other. The entire head, comprising hook and socket, into which handle fits is sturdily constructed of pressed steel. The knife, made of tempered tool steel, is round in shape and arranged to rotate slightly with each cut, thus providing the entire circumference of the blade for cutting and giving an edge more than three times the length of that on the ordinary blade.

The leverage makes this trimmer cut easily limbs up to 1 1/4 inch, both green and dry. Knife may be readily removed for sharpening or renewal.

Two threaded holes are provided for attaching saws shown in this catalog.

CAT. No. 3628 Head only. No saw, rope or handle. SIZE 12 1/2 inch. WEIGHT EACH 3 lbs.

## CIRCULAR KNIFE FOR TREE TRIMMER

This knife is made of first quality tool steel oil tempered. Diameter 2 5/8 inches. Hole at center 1/2 inch diameter. Double bevel for easy cutting.

CAT. No. 3628-K Circular Knife, 2 5/8 in. diameter. WEIGHT PER DOZ. 2 lbs.



No. 3628-K

## KLEIN'S TREE TRIMMER SAWS



No. 913-12

CAT. No. 913-12 . . . . . 12 in. . . . . 4 1/2 lbs.  
913-15 . . . . . 15 in. . . . . 4 3/4 lbs.



No. 913-15

WEIGHT PER DOZ. 4 1/2 lbs.  
4 3/4 lbs.

Teeth set to cut on up and down stroke.

Readily attached to tree trimmer. The curved blade saw is particularly efficient and easy cutting even for large limbs.

## No. 913-G KLEIN'S SAW HANDLE

CAT. No. 913-G . . . . . 4 1/2 lbs.



No. 913-G

When a hand saw is required either of the tree trimmer saws shown above can be set in this handle in a few seconds and held securely with a single thumb screw. Makes an efficient hand saw for cutting heavy branches.

## KLEIN'S TREE TRIMMER HANDLES

(With Locking Ferrules)



No. 3605

CAT. No. 3605-6 One set 18 ft. 3 sections with ferrules . . . . . 125 lbs.  
3605-9 One set 18 ft. 2 sections with ferrules . . . . . 123 lbs.

Handles are 1 5/8 inches round selected Washington Fir turned at ends for ferrules. The inner ferrules are brass 5 inches long x 1 1/2 inches diameter. The outer ferrules are of seamless steel tubing 7 1/2 inches long—galvanized.

The brass ferrule carries the 1/2 inch locking pin which engages in hole drilled in the

steel ferrule and is held in position by a concealed coil spring inside the handle. The locking pin can be depressed readily by thumb pressure when assembling the handle sections or taking them apart.

This simple arrangement is practically automatic and entirely removes any possibility of handles pulling apart in use.

## KLEIN'S TREE TRIMMER HANDLES

(Plain Brass Socket Ferrules)



No. 3601

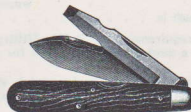
CAT. No. 3601-6 One set 18 ft. 3 sections . . . . . 120 lbs.  
3601-9 One set 18 ft. 2 sections . . . . . 118 lbs.

Handles are 1 5/8 inches round selected Washington Fir. A brass ferrule 7 inches long x 1 1/2 inches diameter is permanently attached

at upper end of section. The lower end of each section is turned to fit into the brass ferrule for 3 1/2 inches.

## KLEIN'S "XELA" ELECTRICIAN'S KNIFE

A Handy Combination for the Electrician.



No. 1550-2

CAT. No. 1550-2 Double Blade . . . . . 2 lbs.

The blades of this knife are made of high grade cutlery steel carefully tempered.

The locking feature on the screw-driver blade is simple and of such construction that it does not wear out.

It automatically locks the blade when open, yet a slight side pressure of the thumb releases the lock and permits the blade to be closed readily. Handle of cocobola—hard and durable.

## KLEIN'S SKINNING KNIFE

(With Insulated Handle)



No. 1560-3

Here's a knife linemen have been looking for. The "half hard" rubber handle is molded on securely and provides adequate

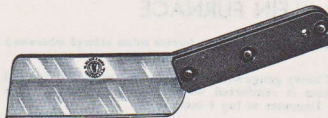
CAT. No. 1560-3 Length overall 8 in. Blade 3 in. . . . . 4 1/4 lbs.

insulation as well as a good generous grip. Shouldered out at the blade to prevent accidental cutting of glove or finger. The shape of the blade brings the point below the curve—a real safety feature. Back of blade ground flat for scraping. The hole in the handle is through the solid rubber. Forged from first quality cutlery steel individually tempered.

See also Knife Pocket No. 5163 made for this knife.

## KLEIN'S CABLE SHEATH SPLITTING KNIFE

Heavy Duty Type



No. 1515-1

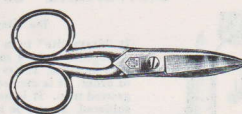
Blade tempered and ground to keen edge. Has strong leather handle, securely riveted. Temper blued finish. A sturdy knife that will stand up to hard usage. Length over all 9 1/4 inches. Blade 4 1/2 inches.

CAT. No. 1515-1 . . . . . 13 lbs.

## KLEIN'S "XELA" ELECTRICIAN'S SCISSORS

A scissor designed for the electrician and mechanic. Will stand continued hard service. Made of high-grade steel properly tempered. Has a screw hinge, allowing adjustment. Nickel plated finish.

CAT. No. 2100-5 5-inch . . . . . 2 lbs.



No. 2100-5

## KLEIN'S INSPECTORS' POCKET TOOL KIT

Solid black leather folding case strongly stitched, reinforced back. Fitted with one each of the following tools.

201-6 Side Cutting Plier.  
301-5 Long Nose Plier.  
1550-2 "Xela" Electrician's Knife.  
1 Pair Electrician's Tweezers.  
1 Special File.  
1 Insulated Screwdriver.

A very handy assortment to fit the pocket.

Size closed 6 1/2" x 3 1/4" x 1 1/4".

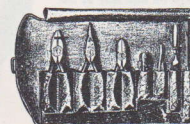
CAT. No. 1305-2 . . . . . 1 1/4 lbs.



No. 1305-2

## KLEIN'S POCKET TOOL ROLL

Just the tool you want—right where you want it. This new handy kit designed for mechanics, service men, electricians or any man who is proud of good tools. Keratol Roll with strap and buckle. Size rolled 8" x 2 1/2" diameter.



No. 1305-33A

Comprises the following:

1 No. 201-6 N.E. Side Cutting Plier  
1 No. 301-6 Long Nose Plier  
1 No. 202-5-A Oblique Cutting Plier

CAT. No. 1305-33-A . . . . . 1 1/2 lbs.

1 No. 1550-2 Electrician's Knife  
1 File  
1 Pair Electrician's Tweezers  
1 Insulated Screw Driver

WEIGHT EACH 1 1/2 lbs.



# CATALOG No. 39—NET PRICE LIST

Effective April 1, 1939

Prices subject to change without notice

## Section No. 1—Klein Pliers

Page	Catalog No.	Net Price	List	Page	Catalog No.	Net Price	List
2	201-5	Doz. \$18.40	Ea. \$2.30	3	203-5	Doz. \$16.40	Ea. \$2.05
	201-6	Doz. 19.60	Ea. 2.45		203-6	Doz. 18.40	Ea. 2.30
	201-7	Doz. 22.40	Ea. 2.80		203-7	Doz. 20.00	Ea. 2.50
	201-8	Doz. 24.00	Ea. 2.95		303-6	Doz. 14.80	Ea. 1.85
	201-9	Doz. 30.40	Ea. 3.80		317-6	Doz. 14.80	Ea. 1.85
	212-6	Doz. 22.40	Ea. 2.80		217-6	Doz. 18.40	Ea. 2.30
	212-7	Doz. 24.00	Ea. 3.00		313-6	Doz. 21.20	Ea. 2.65
	212-8	Doz. 30.40	Ea. 3.80		305-6	Doz. 16.40	Ea. 2.05
	201-5-NE	Doz. 18.40	Ea. 2.30		206-6	Doz. 18.00	Ea. 2.25
	201-6-NE	Doz. 19.60	Ea. 2.45		311-5½	Doz. 18.00	Ea. 2.25
	201-7-NE	Doz. 22.40	Ea. 2.80	4	304-6	Doz. 16.40	Ea. 2.05
	201-8-NE	Doz. 24.00	Ea. 2.95		205-6	Doz. 18.00	Ea. 2.25
	201-9-NE	Doz. 30.40	Ea. 3.80		302-6	Doz. 19.60	Ea. 2.45
	212-6-NE	Doz. 22.40	Ea. 2.80		316-S	Doz. 18.00	Ea. 2.25
	212-7-NE	Doz. 24.00	Ea. 3.00		301-C	Doz. 18.00	Ea. 2.25
	212-8-NE	Doz. 30.40	Ea. 3.80		039	Doz. 22.40	Ea. 2.80
	202-5	Doz. 16.00	Ea. 2.00		203-8	Doz. 28.40	Ea. 3.55
	202-6	Doz. 17.20	Ea. 2.15		203-8-N	Doz. 30.40	Ea. 3.80
	245-5	Doz. 16.00	Ea. 2.00		301-6-VP	Doz. 20.40	Ea. 2.55
	245-5-W	Doz. 18.80	Ea. 2.35		202-5-VO	Doz. 21.60	Ea. 2.70
3	240-5-S	Doz. 18.00	Ea. 2.25	5	202-5-VC	Doz. 20.80	Ea. 2.60
	240-5	Doz. 17.20	Ea. 2.15		202-5-AV	Doz. 18.40	Ea. 2.30
	240-6	Doz. 18.40	Ea. 2.30		245-5-V	Doz. 18.40	Ea. 2.30
	202-5-SW	Doz. 19.20	Ea. 2.40		301-5-V	Doz. 18.00	Ea. 2.25
	202-5-A	Doz. 16.00	Ea. 2.00		203-5-V	Doz. 20.40	Ea. 2.55
	202-6-A	Doz. 17.20	Ea. 2.15		406-6½	Doz. 10.00	Ea. 1.25
	242-6	Doz. 17.60	Ea. 2.20		407-7	Doz. 12.00	Ea. 1.50
	220-7	Doz. 18.40	Ea. 2.30		408-8	Doz. 14.00	Ea. 1.75
	232-5½	Doz. 26.00	Ea. 3.25				
	232-7	Doz. 29.20	Ea. 3.65				
	235-6	Doz. 25.60	Ea. 3.20				
	301-5	Doz. 13.60	Ea. 1.70				
	301-6	Doz. 14.80	Ea. 1.85				
	301-7	Doz. 16.40	Ea. 2.05				

## Section No. 2—Splicing Clamps

Page	Catalog No.	Net Price
6	102-1	Ea. \$2.50
	102-3	Ea. 3.20
	102-30	Ea. 3.20
	102-48	Ea. 3.20
	105-15	Ea. 2.65
	105-17	Ea. 3.20
	105-31	Ea. 2.65
	132-15	Ea. 4.55
	132-46	Ea. 4.55
	132-12	Ea. 3.35
7	132-30	Ea. 4.55
	132-48	Ea. 5.30
	132-39	Ea. 4.55
	132-47	Ea. 5.30
	132-74	Ea. 5.30
	107-20	Ea. 10.30
	107-34	Ea. 15.00

## Section No. 3—Climbers

Page	Catalog No.	Net Price
8	1939	Pair \$4.00
	1900	Pair 3.60
	1901	Pair 3.60
	1903	Pair 3.60
	Regaffing above Climbers	Pair 2.25
1907	Regaffing Tree Climbers	Pair 4.00
	Regaffing Tree Climbers	Pair 2.75

## Section No. 4—Leather Goods

Page	Catalog No.	Net Price
9	N.O. 1 Neatsfoot oil	Ea. \$ .75
	Pint	Ea. \$ .75
	N.O. 2 Neatsfoot oil	Ea. 1.25
	Quart	Ea. 1.25

## Section No. 4—Leather Goods (Continued)

Page	Catalog No.	Net Price
9	N.O. 4 Neatsfoot oil	
	Half Gallon	Ea. \$2.25
	5301-1	Set 3.55
	5301-2	Set 3.75
	5301-3	Set 3.75
	5301-11	Set 3.45
	5301-12	Set 3.65
	5301-13	Set 3.65
	5301-6	Set 3.95
	5301-7	Set 4.10
	5301-8	Set 4.10
	5301-4	Pair 1.45
	5301-9	Pair 1.40
	5301-14	Pair 1.60
	5301-10	Pair 1.55



# Section No. 4—Leather Goods (Continued)

Page	Catalog No.	Net Price
9	5301-5 .....	Pair \$2.10
	5301-15 .....	Pair 2.05
	5301-16 .....	Pair 1.80
	5301-26 .....	Pair 1.60
10	8200 .....	Pair .85
	8201 .....	Pair .85
	8202 .....	Pair .65
	8206 .....	Pair .70
	8203 .....	Pair 1.00
	8204 .....	Pair 1.15
	8205 .....	Pair 1.15
	1929-G .....	Pair .35
	5228 .....	Ea. 8.75
	H-5228 .....	Ea. 8.75
11	5204-TSO .....	Ea. 7.65
	H-5204-TSO .....	Ea. 7.65
	5204-DE .....	Ea. 6.60
	H-5204-DE .....	Ea. 6.60
	5204 .....	Ea. 5.10
	H-5204 .....	Ea. 5.10
	5205 .....	Ea. 5.60
	H-5205 .....	Ea. 5.60
	5202 .....	Ea. 4.75
	H-5202 .....	Ea. 4.75
12	5211 .....	Ea. 6.25
	H-5211 .....	Ea. 6.25
	5221-KK .....	Ea. 6.45
	H-5221-KK .....	Ea. 6.45
	5212 .....	Ea. 5.50
	5214 .....	Ea. 3.85
	5214-O .....	Ea. 3.75
	5206-1-A .....	Ea. 9.60
	5209 .....	Ea. 6.70
	5227-KK .....	Ea. 4.60
13	H-5227-KK .....	Ea. 4.60
	KL-5251 .....	Ea. 5.35
	5251 .....	Ea. 4.85
	H-5251 .....	Ea. 4.85
	KL-5250 .....	Ea. 5.35
	5250 .....	Ea. 4.85
	H-5250 .....	Ea. 4.85
	5215 .....	Ea. 2.55
	H-5215 .....	Ea. 2.55
	KL-5253 .....	Ea. 6.70
14	5253 .....	Ea. 6.20
	H-5253 .....	Ea. 6.20
	5257-S .....	Ea. 6.50
	5257-L .....	Ea. 6.85
	KL-5258 .....	Ea. 7.20
	5258 .....	Ea. 6.70
	H-5258 .....	Ea. 6.70
	KKD-025 .....	Ea. .25
	KL-5233 .....	Ea. 5.35
	5233 .....	Ea. 4.85
15	H-5233 .....	Ea. 4.85
	KL-5234 .....	Ea. 4.15
	5234 .....	Ea. 3.65
	H-5234 .....	Ea. 3.65

# Section No. 4—Leather Goods (Continued)

Page	Catalog No.	Net Price
13	KL-5236 .....	Ea. \$2.10
	5236 .....	Ea. 1.85
	H-5236 .....	Ea. 1.85
	5130 .....	Ea. .20
	5131 .....	Ea. .25
	5132 .....	Ea. .20
	5139 .....	Ea. .75
	5163 .....	Ea. .85
	5118-K .....	Ea. 1.25
	5118-S .....	Ea. 1.05
14	5118-R .....	Ea. 1.25
	5111 .....	Ea. 1.00
	5116 .....	Ea. 1.50
	5107 .....	Ea. .65
	5112 .....	Ea. .85
	5120-9 .....	Ea. 2.00
	5120-15 .....	Ea. 2.65
	5108-14 .....	Ea. 7.50
	5108-16 .....	Ea. 8.00
	5108-18 .....	Ea. 8.50
15	5108-20 .....	Ea. 8.75
	5108-22 .....	Ea. 9.25
	5108-24 .....	Ea. 9.75
	5102-12 .....	Ea. 4.15
	5102-14 .....	Ea. 4.50
	5102-16 .....	Ea. 5.00
	5102-18 .....	Ea. 5.25
	5102-20 .....	Ea. 5.75
	5102-22 .....	Ea. 6.25
	5102-24 .....	Ea. 6.75
16	5105-16 .....	Ea. 5.25
	5105-18 .....	Ea. 5.50
	5105-20 .....	Ea. 6.00
	5105-22 .....	Ea. 6.50
	5105-24 .....	Ea. 7.00

# Section No. 5—Grips

Page	Catalog No.	Net Price
14	1613-30 .....	Ea. \$2.00
	1613-30-B .....	Ea. 3.35
	1613-40 .....	Ea. 3.55
	1613-40-B .....	Ea. 6.00
	1613-50 .....	Ea. 6.00
	1613-50-B .....	Ea. 10.00
	1613-50-A .....	Ea. 6.00
	1613-50-AB .....	Ea. 10.00
	1611-20 .....	Ea. 3.35
	1611-30 .....	Ea. 4.20
15	1611-40 .....	Ea. 6.65
	1611-50 .....	Ea. 6.65
	1628-5-B .....	Ea. 8.75
	1628-5 .....	Ea. 7.00
	1626-39 .....	Ea. 8.90
	1626-39-B .....	Ea. 11.35
	1626-40 .....	Ea. 8.90
	1626-40-B .....	Ea. 11.35
	1626-AB .....	Ea. 14.45
	1628-6 .....	Ea. 11.20
16	1628-6-B .....	Ea. 14.95
	1628-16 .....	Ea. 20.00
	1628-16-B .....	Ea. 23.35
	1628-16-BP .....	Ea. 26.65
	1628-30-B .....	Ea. 60.00
	1628-40-B .....	Ea. 63.35
	1604-10 .....	Ea. 1.90
	1604-20 .....	Ea. 2.80
	1625-20 .....	Ea. 6.55

# Section No. 6 Tackles and Hand Lines

Page	Catalog No.	Net Price
15	1702-20 .....	Ea. \$5.00
	Strap for above .....	Ea. 2.00
	1700-30 .....	Ea. 7.05
	Strap for Above .....	Ea. 2.00
	1802-40 .....	Ea. 10.35
	1802-50 .....	Ea. 11.65
	1802-60 .....	Ea. 12.20
	1802-30 .....	Ea. 3.60
	PARTS FOR ABOVE	
	258 .....	Ea. .75
16	25 ft. Rope .....	Ea. .75
	267 Plain Block only .....	Ea. 1.35
	268 Snubbing Block only .....	Ea. 1.65
	H-1802-30 .....	Ea. 4.15
	PARTS FOR ABOVE	
	258 .....	Ea. .75
	25 ft. Rope .....	Ea. .75
	H-267 Plain Block only .....	Ea. 1.75
	H-268 Snubbing Block only .....	Ea. 2.25
	258 .....	Ea. .75
17	1803-60 .....	Ea. 4.25
	1803-120 .....	Ea. 5.60
	443-A .....	Ea. 1.25

# Section No. 7 Furnaces and Torches

Page	Catalog No.	Net Price
17	3529 .....	Ea. \$20.00
	Parts for Furnace No. 3529	
	Part No.	
	247 .....	Doz. .35
	702-B .....	Ea. 1.25
	703 .....	Ea. .35
	705 .....	Ea. 1.45
	709 .....	Ea. .15
	710 .....	Ea. .10
	711 .....	Doz. .35
18	712 .....	Ea. .20
	713 .....	Doz. .35
	714 .....	Doz. .35
	715 .....	Ea. .25
	716 .....	Doz. .35
	718 .....	Ea. .70
	719 .....	Doz. .70
	720 .....	Ea. .15
	721 .....	Ea. .15
	722 .....	Ea. .10
19	723 .....	Doz. .70
	724 .....	Ea. .90
	728 .....	Ea. .15
	736-A .....	Ea. .20
	737-A .....	Ea. .10
	738 .....	Doz. .35
	739-A .....	Ea. .45
	756 .....	Ea. .15
	769 .....	Ea. .15
	775 .....	Doz. .35
20	776 .....	Ea. .15
	777 .....	Doz. .35
	778 .....	Doz. .70
	779 .....	Doz. .35
	780 .....	Doz. .35



Section No. 7  
Furnaces and Torches  
(Continued)

Page	Part No.	Net Price
16	781 .....	Ea. \$ .15
	782 .....	Doz. .35
	797 .....	Doz. .35
	798 .....	Ea. .55
	799 .....	Doz. .35
	800 .....	Ea. .45
	802 .....	Ea. 1.35
	803 .....	Ea. .85
	804-A .....	Ea. 2.90
	805 .....	Ea. .25
	815 .....	Ea. 2.45
17	Catalog No.	
	3428 .....	Ea. 13.35
	3428-C .....	Ea. 14.25
	808-C .....	Ea. 7.65

PARTS FOR TORCHES  
Nos. 3428 AND 3428-C

Part No.		
16	247 .....	Doz. .35
	709 .....	Ea. .15
	710 .....	Ea. .10
	711 .....	Doz. .35
	714 .....	Doz. .35
	716 .....	Doz. .35
	721 .....	Ea. .15
	733 .....	Ea. .15
	734 .....	Ea. .45
	739-A .....	Ea. .45
	752 .....	Ea. .25

Section No. 7  
Furnaces and Torches  
(Continued)

Page	Part No.	Net Price
16	753 .....	Ea. \$ .15
	754 .....	Ea. 1.85
	756 .....	Ea. .15
	758 .....	Ea. .20
	759 .....	Ea. .45
	763-A .....	Ea. .25
	767 .....	Doz. .35
	768-A .....	Ea. .15
	771 .....	Doz. .35
	772 .....	Doz. .70
16	773 .....	Ea. .10
	775 .....	Doz. .35
	779 .....	Doz. .20
	783 .....	Doz. .20
	784 .....	Ea. .25
	785 .....	Ea. .15
	786 .....	Ea. .70
	791 .....	Ea. .55
	800 .....	Ea. .45
	807-A .....	Ea. 2.20
17	808 .....	Ea. 5.15
	808-C .....	Ea. 7.65
	812 .....	Ea. 3.15
	813 .....	Ea. 1.75
	Catalog No.	
	3010 .....	Ea. 2.00
	3420 .....	Ea. 5.00
	3020 .....	Ea. 12.50

Section No. 8—Miscellaneous

Page	Catalog No.	Net Price
17	3109-20 .....	Ea. \$2.30
	3146 .....	Ea. 2.25
	3146-A .....	Ea. 2.25
	1629 .....	Ea. 1.00
	1629-A .....	Ea. 1.00
	3600-20 .....	Ea. 4.60
	3600-21 .....	Ea. 5.85
	3600-22 .....	Ea. 5.95
	209 .....	Ea. 2.30
	3628 .....	Ea. 5.55
18	3628-K .....	Ea. .90
	913-12 .....	Ea. 1.25
	913-15 .....	Ea. 1.35
	913-G .....	Ea. .75
	3605-6 .....	Per Set 6.25
	3605-9 .....	Per Set 5.35
	3601-6 .....	Per Set 4.85
	3601-9 .....	Per Set 4.50
	1550-2 .....	Ea. 1.35
	1560-3 .....	Ea. 1.50
	1515-1 .....	*Ea. 1.75
	2100-5 .....	Ea. .85
	1305-2 .....	Ea. 7.50
	1305-33-A .....	Ea. 9.00



